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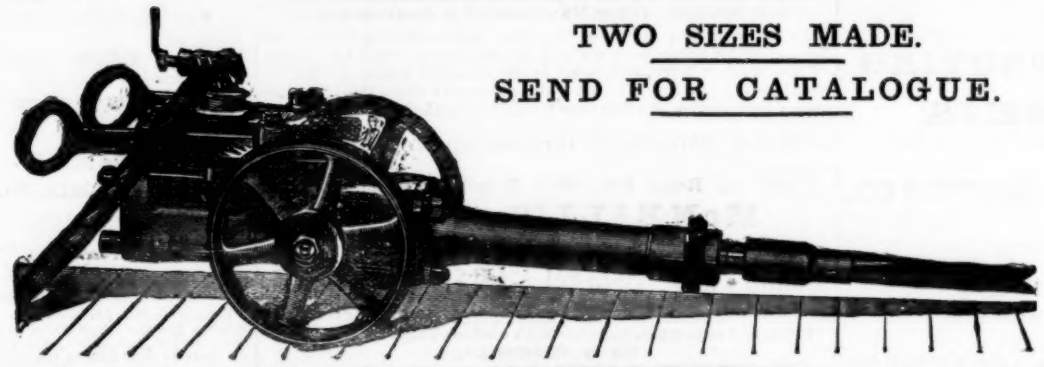

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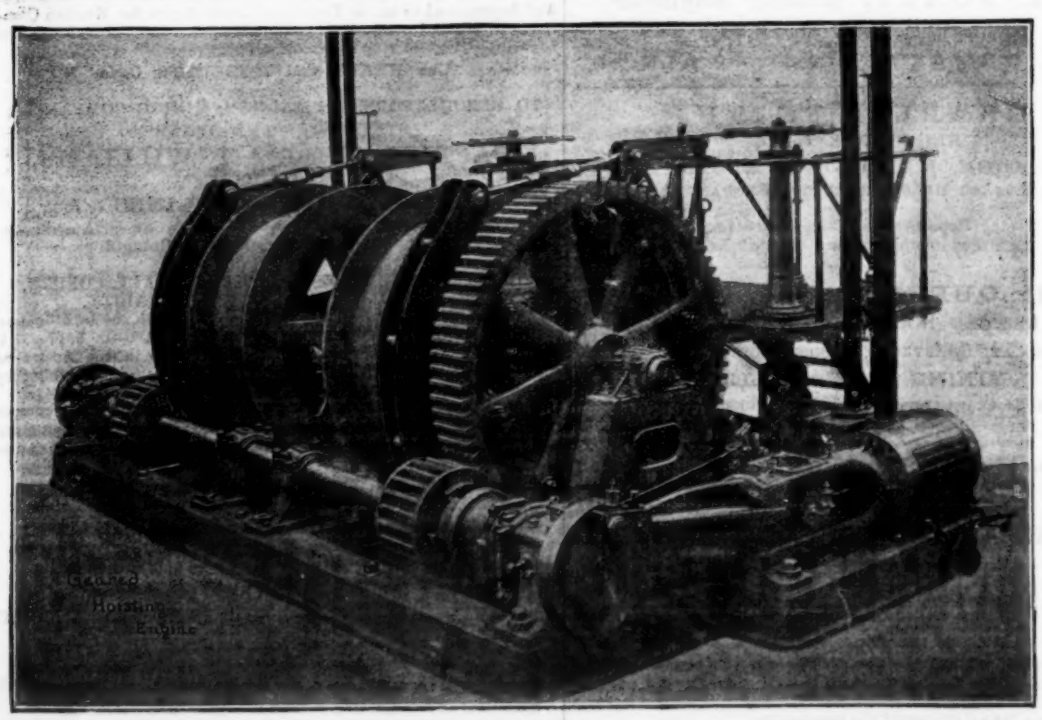

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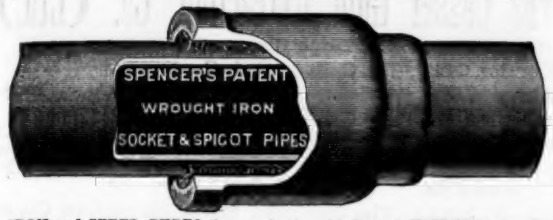

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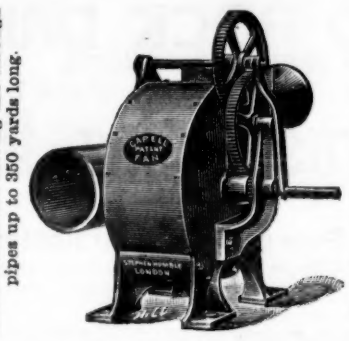

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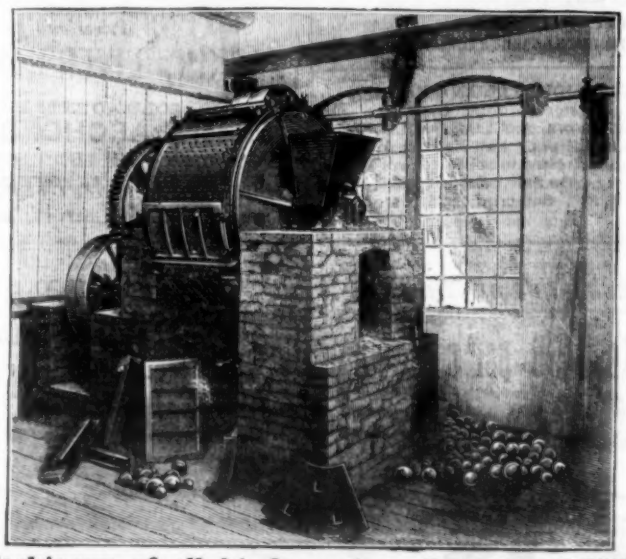

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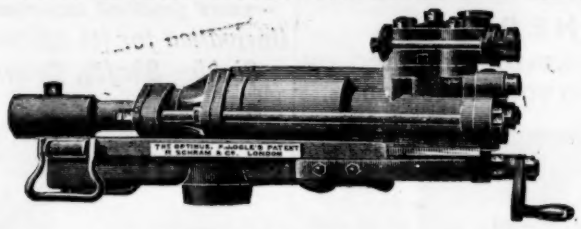

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From R. Burdon Sanderson, Esq., Warren House, Belford
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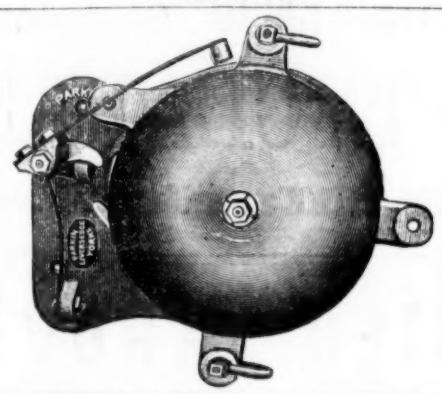

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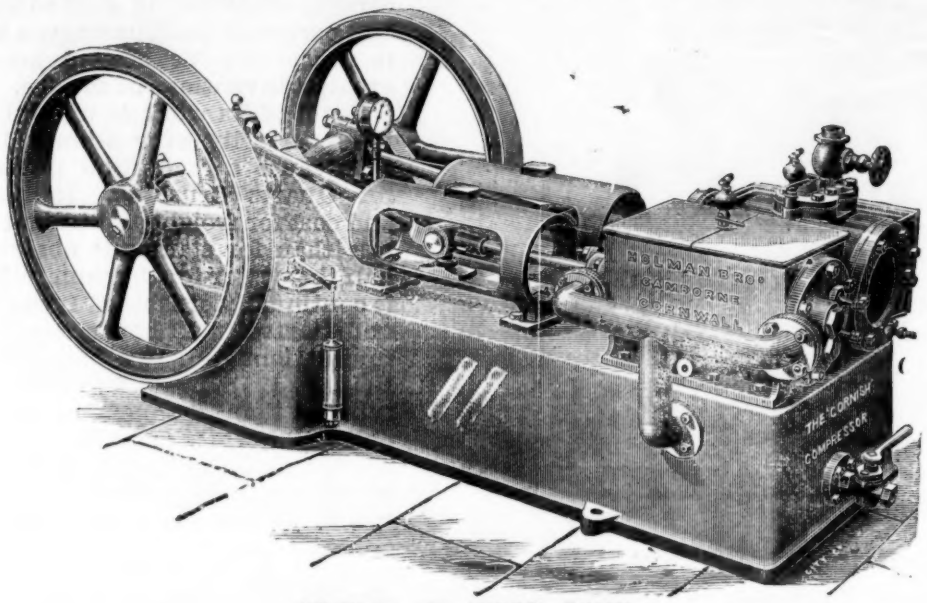

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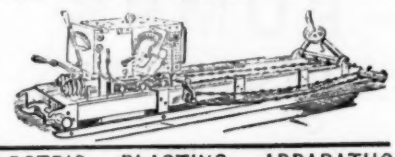

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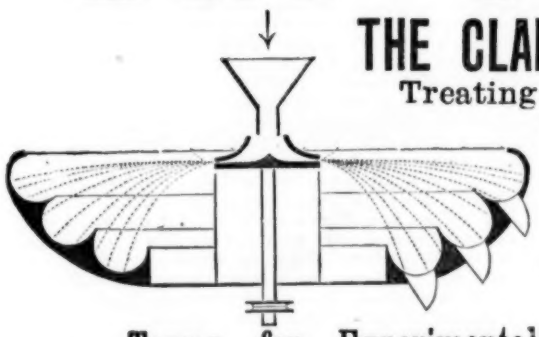

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Withington. October 6 (*Lune*).—For the construction of detritus tanks and engine house, &c., at their sewage farm, Oberlton-cum-Hardy, for the Withington Local Board. Plans, sections, and specifications of the works may be seen, and a form of tender with quantities and any further information obtained from Mr. A. H. Mountain, A.M.I.C.E., surveyor.

Railway. October 8 (*Glasgow*).—For the construction of the branch railway and works comprised under the Cordale contract. Plans, sections, and drawings can be seen at the office of Messrs. Formans and M'Call, civil engineers, 160, Hope Street, Glasgow.

Fencing. October 9 (*Wimbledon*).—For the following lengths of fencing: (1) About 750 feet run of close paled oak fence, with two pairs of gates; and (2) about 600 feet run of dwarf iron fence, for the Wimbledon Local Board. Both to be in accordance with plans and specifications, to be seen at the offices of the Board, Broadway, Wimbledon.

Wells. October 13 (*King's Lynn*).—For boring or sinking through the chalk two 7 feet diameter wells, together with the necessary headings and provision of temporary pumping plant for proving the wells, for the Corporation. Plans and specifications of the Waterworks Engineer, King's Lynn.

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NEW PATENTS.

LIST of APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

17,71 Ludovius Gerardus Kok, 96, Buchanan Street, Glasgow.—Improvements in and relating to funnels of furnaces.—September 10.
17233 John Henry Knight, Barfield, Farnham, Surrey.—Improvements in oil or hydro-carbon engines.—September 11.
17239 George Rose Gowenlee, Bishopbriggs, Glasgow.—Improvements in oil, vapour, and steam generators, for the better combustion of light or heavy hydro-carbons for lighting, heating, ventilating, and other purposes.—September 11.
17259 Alfred Julius Boult, 323, High Holborn, London.—Improvements in boiler tube attachments.—September 11.
17273 William Robert Lake, 45, Southampton Buildings, Chancery Lane, London.—Improvements in rotary motors.—September 11.
17286 Charles Dell Mosher, 45, Southampton Buildings, Chancery Lane, London.—Improvements in boilers or steam generators.—September 11.
17287 Phillip Arthur Newton, 6, Bream's Buildings, Chancery Lane, London.—Improvements in valves for compound direct-action engines.—September 11.
17294 William Warren Wainwright, 52, Chancery Lane, London.—Improvements in bearings for rotary blowers.—September 11.
17318 James Roots, Manor Road, Teddington.—Improvements in internal combustion engines.—September 11.
17322 William George Bohenna, Moor View, Bodmin Road, St. Austell, Cornwall.—An improved funnel.—September 12.
17340 George Love, Malton House, Quebec, Durham.—Improved treatment of molten iron or steel.—September 12.
17399 Henry Christian Lobnitz, 87, St. Vincent Street, Glasgow.—Improvements in steam pumps.—September 13.
17404 George Finney, 12, Southampton Buildings, Chancery Lane, London.—Improvements in pistons for steam and other engines.—September 12.
17434 Felix Hraba, 11, Southampton Buildings, Chancery Lane, London.—An improved ball-operated motor.—September 13.
17511 Henry Berry, 13, Southampton Buildings, Chancery Lane, London.—Improvements in hydraulic and other valves.—September 14.
17524 George Andrews, 8, Quality Court, Chancery Lane, London.—Improvements in hydraulic lifts and cranes.—September 14.
17537 George Francis Harver, 4, South Street, Finsbury, London.—Improvements in pumps.—September 14.
17549 Patrick Fraser Maccullum, Fairbank, Helensburgh, Dumbartonshire.—Improvements in internal combustion.—September 15.

SPECIFICATIONS PUBLISHED.

16,210, Crawford, pulverising gold bearing quartz, &c., 1893; 16,462, Ackroyd and Best, replenishing miners', &c., lamps, 1893; 16,681, Koch, sinking shafts, 1893; 19,379, Owen and Todd, steam boilers, 1893; 19,742, Cooper, miners' safety lamps, 1893; 20,068, Lake, metallurgical furnaces, 1893.

The above specifications published may be had of Messrs. Rayner and Company, 37, Chancery Lane, London, at 10d. each including postage.

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TO CORRESPONDENTS.

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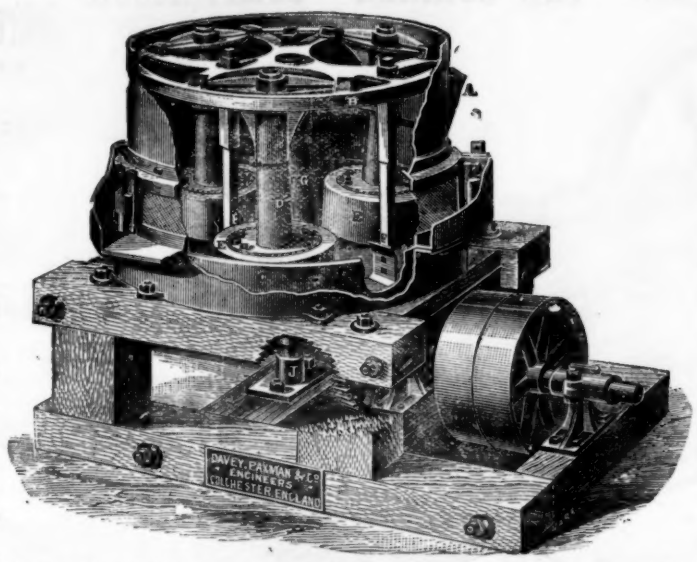

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THE ORIGIN OF THE GOLD OF QUARTZ VEINS.

By Professor J. LOGAN LOBLEY, F.F.S.

NOT more than 30 years ago the hypothesis of the igneous origin of the "vein stuff" of mineral veins was stoutly advocated by eminent geologists, and yet to-day the theory, so far as regards the earthy minerals of a vein, may almost be considered to be obsolete. The gold of quartz veins, however, is still held by many to have been introduced into the interstices of the quartz by igneous action. There are others again who, while admitting the aqueous introduction of the gold into the veins, still maintain the theory of its earlier igneous uprise from the deep interior into the massive rocks containing the veins. Recent observations and discoveries by geologists and chemists have now, however, laid the foundations for a theory which attributes the gold of quartz veins not only to an aqueous conveyance to the veins, but to an aqueous origin also, since it makes the waters of the sea the source of the gold.

The opinion of Sir Roderick Murchison, that auriferous veins were confined to Palæozoic rocks or the neighbourhood of igneous eruptions, has been contradicted by the finding of gold bearing quartz veins in California traversing Cretaceous and Tertiary strata; even in localities where there are no indications of igneous action having taken place either in Cretaceous or Tertiary times. This goes far to displace the igneous hypothesis, but there is a fact of very great significance in this controversy which seems to have been strangely overlooked by the disputants. It is the remarkable absence of gold from volcanic products.

If gold was originally derived from plutonic sources, it ought to be found among volcanic products which come from the same deep-seated sources, and only differ from plutonic rocks in having been solidified under different conditions. But, although a most widely distributed metal, gold is almost if not quite unknown as a volcanic product. That quartz veins and metalliferous lodes containing the precious metal occur in some regions that have been subjected to volcanic action is true, but other regions of a still more pronounced volcanic character are non-auriferous. It is, too, a most important consideration that in gold-producing volcanic regions, the gold is rather in the veins traversing the non-volcanic rocks than in the volcanic rocks themselves. It may also be asked, Why is not gold a usual product of volcanic regions? So far, indeed, from volcanic districts being usually auriferous, the reverse is the case, for the usual non-association of gold with volcanic products is a conspicuous fact, and a much more remarkable and telling one than its mere statement suggests, both from the very wide distribution of gold and the richness of volcanic products in mineral species, metallic as well as non-metallic.

The great volcanic island of Iceland is devoid of gold, as are also the eminently volcanic areas of Sicily, the Lipari and Pouza Islands, as well as the several extinct volcanic districts of Italy. The great volcanic district of Auvergne in central France, and the volcanic districts of the Eifel and Siebengeberge, in Germany, are all non-auriferous; but we seek for gold with success in the bed of the Rhine that brings detritus from the non-volcanic Alps, and find it *in situ* in the non-volcanic rocks of Schemnitz, in Hungary, and the Abrudbanya, in Transylvania, while the volcanic trachytes of these districts are devoid of the precious metal.

Nor is the absence of gold from volcanic products only noticeable in the European part of the earth's surface. In the volcanic islands of the Pacific gold is also conspicuous by its absence, but non-volcanic New South Wales and Queensland are richly auriferous; and although there is gold in the volcanic North Island of New Zealand there is very much more in the non-volcanic South Island, while that in the North Island is not in volcanic rocks. The gold fields of India are not amongst the volcanic rocks of the Deccan, but on the non-volcanic plains of Mysore, and the great auriferous regions of northern Asia are in the Urals, and central and eastern parts of Siberia, all non-volcanic. Western Africa, too, distant from the volcanic Cameroons, gives to the Gold Coast its auriferous sands, but from the altogether volcanic Canary Islands gold is not obtained.

But certainly the most striking example of the non-auriferous character of volcanic products has yet to be mentioned. The Vesuvian area of about 100 square miles has produced by far the greatest variety of minerals of any area of even a hundred times its extent. These include a number of metallic minerals; but neither gold nor any salt of gold, or auriferous compound or alloy of any kind, has ever been noted, notwithstanding the diligent examination to which Vesuvian products have been subjected by competent observers for a long period of time.

The occurrence of rich auriferous detritus beneath masses of lava, both in California and in Victoria, has no bearing on the question, since these detrital deposits are not derived from the place where they now are, but from hills at a considerable distance, in which were the auriferous veins long before the outburst of the lavas now covering the beds that have resulted from the erosion of the rocks of which those elevations were formed. Indeed, in view of the wide dissemination of gold in the rocks of every continent, and its absence from so many widely separated volcanic regions, it would seem to be but a fair and reasonable conclusion that the gold of the surface rocks has not been derived from volcanic sources, and, therefore, not from the sources of plutonic rocks, and consequently not by igneous action.

The aqueous hypothesis of the occurrence of metallic gold in quartz veins is based on the following considerations:—Gold is one of the most insoluble and unchanging of minerals, whether metallic or non-metallic. It is not oxidised by either air or water, and is not attacked by any of the ordinary acids, much less is it dissolved by water, either cold or hot. But it chemically unites with some, though very few, elements, and so forms auric compounds, and these compounds are soluble to a greater or less extent in water, and it is itself soluble in selenic acid and also in aqua-regia or nitro-hydrochloric acid under certain conditions. Chlorine is one of the few elements with which gold forms a chemical compound, and this salt of gold, the auric chloride, or the terchloride of gold, is readily dissolved by water at ordinary temperatures. With sulphur a sulphide of gold is formed that is also a soluble salt, though not nearly so much so as is the chloride.

The long continued unsuccessful efforts to crystallise carbon and alumina, though minute diamonds and rubies were eventually produced, sufficiently show that in Nature's laboratory conditions obtain that can only with the greatest difficulty be produced artificially. It seems probable that under natural conditions of heat and pressure, gold will unite with silica, forming a silicate of gold slightly soluble in hot water. Thus the same conditions that favour the solution of silica itself, which, as is well known, is slightly soluble in hot water, and the deposition of it in cavities or fissures would likewise be favourable to the formation of a silicate of gold in siliceous auriferous rocks, and the subsequent solution of the compound and its transportation also from the massive rock into any cavity or fissure. There would thus be an infilling of fissures with silica, together with an admixture of silicate of gold, not to mention other minerals. Time alone would then be required to effect the complete separation of the gold from the silica with which it was united, and leave it as free metallic gold in the diversified forms and quantities in which it is now found in quartz veins. In support of this view, Bischoff, Dr. Sterry Hunt, and Professor Newbery, all high authorities, have expressed the opinion that gold has probably been introduced into veins in the form of silicate.

The problem of the origin of gold, then, seems to be reduced to accounting for its occurrence in sufficient quantity in ordinary marine sedimentary rocks. As all the materials of these rocks were derived directly from the seas of the globe, it will be necessary to ask, in the first place, Could the sea water contain and deposit the gold now imbedded and disseminated in the rocks of the globe? The question can now be answered very distinctly in the affirmative.

Since the sea is the great receptacle for all solutions, it was safe to conclude that it contained the soluble salts of gold, but the fact is not now a matter of mere deduction, but of actual knowledge. Sonstadt found, from careful experiments on the sea water of Ramsey Bay, Isle of Man, that sea water contains a little under a grain of gold per ton. Estimating the whole of the gold production of the world to the present time at £8,500,000,000 sterling, and taking the weight of the sea water of the globe at 560,000,000,000,000,000 tons, as estimated by Professor Wurtz, of New York, we find that the present seas of the globe contain upwards of 5,000,000 times as much gold as has ever been extracted from the rocks; and consequently we must conclude that the seas of the globe in the past have been fully able to stock its mineral deposits with all the gold they contain.

We now arrive at the next stage of the enquiry, which is, How can the gold be separated from its marine solution and be deposited along with the materials of the sands, the shales, the clays, and the limestones that constitute the sedimentary rocks?

By the accidental dropping of a piece of cork into a solution of chloride of gold, Mr. Richard Daintree, of the Geological Survey of Victoria, discovered that organic matter causes the decomposition of an auric chloride solution, and the consequent precipitation of metallic gold. During the deposition of the materials of the sedimentary rocks at the bottoms of the Palæozoic and Secondary and Tertiary seas, much organic matter undoubtedly existed on the sea bottom. Some strata are so crowded with the fossilised enduring parts of animal organisms, that they are now actually named, in geological nomenclature, "bone beds" and "shell beds," and we have abundant evidence of the existence, also, through the geological periods, of a great amount of algæ or seaweed.

Assuming, then, that the waters of the seas of the past contained gold by the solution of its salts as our present sea water does, the conditions would be quite favourable for the deposition of gold contemporaneously with the accumulation of the ocean bed. The amount of gold thus deposited would, however, necessarily be so exceedingly small in proportion to the mass in which it was included, as to be almost infinitesimal, and too little, therefore, to be detected in the resulting rocks, unless concentrated by separation from the general mass and accumulation in aggregations conjointly with other metallic mineral matter.

Consequent upon the important discovery of Daintree, Professor C. Wilkinson carried out a long series of experiments, from which it was evident that gold precipitated by organic matter aggregated around metallic nuclei, and that besides gold itself, the sulphides of the metals, as pyrites and galena, were especially attractive. This is in entire accordance with the well-known fact of the association of gold with the metallic sulphides, and particularly with pyrites. When in association with pyrites and other metallic minerals, whether an association of adhesion merely or as an alloy, the gold would remain so associated until induced by the occurrence of new and favouring conditions to sever itself from its metallic associates, and chemically combine with an element or a compound for which, under the conditions to which it was exposed, it had affinity, and which body, I imagine, would be supplied by silica.

From these considerations, it seems probable that gold was originally dissolved in the waters of the ocean, from which it was deposited as the result of the decomposition of soluble salts of gold by the action of organic matter, and that it was then eliminated from sedimentary rocks by segregation to other metallic matter with which it remained associated until thermal conditions, caused by deep-seated position, or not far distant igneous action, induced a chemical reaction, and likewise heated sufficiently the subterranean water of the rocks to make it an effective solvent of the auriferous compound. So the gold of the massive rocks was carried with silica by percolating water into the accumulating veinstuff of rock fissures, where, on cooler conditions supervening, the auriferous compound was deposited in a solid condition, and the gold itself subsequently separated, by the segregation of the silica to the vein quartz, and left disseminated through the veinstuff as metallic gold in the forms in which it is now found.—*Mining and Scientific Press.*

NITRATE OF SODA.—Mr. Thomas Aikman, jun., reports: September 24. The fortnight's arrivals for Europe reach about 51,000 tons, of which about 20,000 tons called for orders. At the beginning of the fortnight 9s. per cwt. for handy size due cargo was paid, since when, with heavy arrivals and more sellers, a fraction under this price would be accepted, but buyers continue reserved. In distant positions business in October-November shipment at the equivalent of 9s. 3d. to 9s. 2d. per cwt. as in size, has taken place, closing quiet. Shipment by steamer in January has offered at the equivalent of 9s. 2d. to 9s. 3d., and February sailing cargo is reported at the equivalent of about 9s. per cwt. Business in refined quality, for summer and autumn shipment, 1895, is believed to have taken place at about 9s., and in ordinary quality at about 3d. per cwt. less. Cable quotations are: cost 6s. 3d. to 6s. 4½d. per quintal for near loading, and 6s. 2d. to 6s. for next year's shipment: Exchange 11½d., and freights quiet at 25s. per ton, with over 53,000 tons register disengaged spot tonnage. The sailings for September are estimated to reach about 80,000 tons to Europe, and 2,000 tons to the United States, with about 90,000 to 100,000 tons loading for Europe on October 1. The total exports for Europe for the last four months of the year are now stated as unlikely to exceed those of last year, which were 400,000 tons.

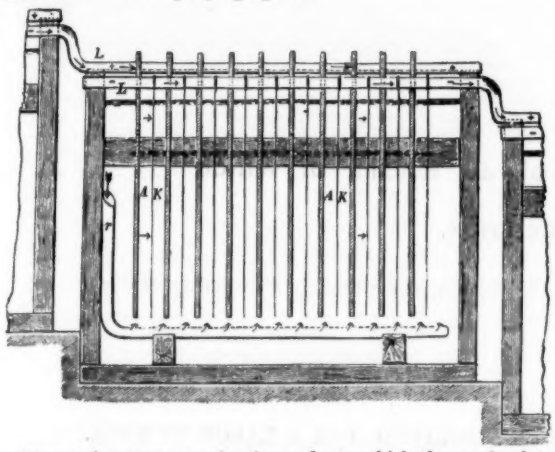
SOME recent crushings from West Australia are as follows:—Bayleys' Reward, 250 tons for 2400 ounces; Cue (Murchison), 8 tons for 20 ounces; Francis Reward, 23 tons for 57 ounces; Ironclad (Marble Bar), 50 tons for 117 ounces; Mount Prophesy, 63 tons for 217 ounces; Premier (25 mile), 8 tons for 188 ounces; and Star of the East, 160 tons for 314 ounces and 140 tons for 201 ounces.

THE EXTRACTION OF COPPER FROM ALLOYS BY MEANS OF ELECTROLYSIS.

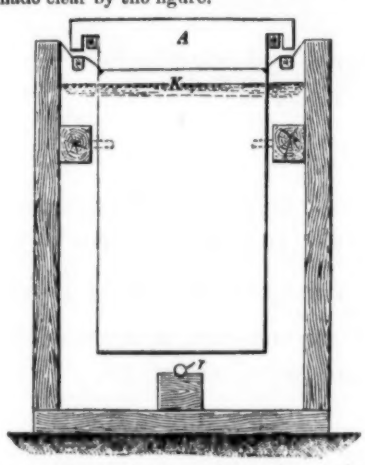
By Dr. CARL SCHNABEL.

(*Concluded from page* 1035.)

AT the North German Refinery, Hamburg, they also use Gramme machines. These deliver, with a consumption of 12-horse power, an electro-motive force of 27 volts, and a current of 300 ampère. The number of baths placed one after the other is 60; the surface of the anodes of one bath is 15 square metres. The copper precipitated per 24 hours is 900 kilogrammes (3·12 kilogrammes per hour and horse power). The arrangement of the baths for the electrolysis of copper alloys is shown in the accompanying figures.



LL are the copper conducting rods, to which the anode plates A, and the cathode sheets, K, are alternately hung. The anode rods are distinguished by +, and the cathode rods with — sign. The course of the electric current is shown by horizontal arrows. The manner in which the baths are arranged one after the other in steps is made clear by the figure.



To each long side of a bath wooden laths are fastened, into which wooden plugs are fixed. The latter keep the electrodes at the proper distance apart, thus preventing short circuiting. The electrolyte fills the bath almost to the height of the lowest conducting rod.

The box of the bath is constructed out of strong wooden planking, which is strengthened on the outside by strong battens. On the inside, it is lined with sheet lead. They possess a length, depending on the number of electrodes, of from 1 to 3 metres or more. The bottom must lie so deep below the lowest edges of the electrodes that a short circuit between the latter and the deposited mud on the bottom cannot take place.

The conducting rods are constructed out of electrolytic copper, a few centimetres thick, and are so arranged that each electrode can be removed and replaced by another without much trouble.

The anodes are cast in cast iron moulds in such a shape that they possess lugs at the two upper corners, by means of which they are suspended from the anode conducting rod. At Oker the anodes are 1 metre long, 0.5 metre broad, and 15 millimetres thick.

The cathode sheets are composed of electrolytic copper, and possess but a very slight thickness (down to O. 3 millimetres). In order to be able to remove the deposit of copper easily in the form of plates, the cathode sheets are smeared with petroleum ether, and the edges coated with paraffin. The cathode sheets are hung on the cathode conducting rods by means of strips of sheet copper (of about 2 millimetres thick, and 2 centimetres wide) which can be rivetted to the sheet. The point of connection must lie above the surface of the fluid, or else be coated with paraffin to protect it from the influence of the liquid.

The distance of the electrodes from each other is best empirically at 5 centimetres.

The author has seen a peculiar arrangement of the electrodes (one after the other in the bath) at the Anaconda Works in Montana. It has been patented by the inventor, O. Stalmann, in the United States of North America (Patent No. 467,350, dated January 19, 1892, and Patent No. 467,484 dated January 19, 1892).

The first anode, and the last cathode of every bath is suspended alone, while the electrodes situated between them are united in independent pairs. Each of these couples consist of one anode plate and one cathode plate, the adjacent faces of which are kept apart by non-conducting layers of glass, asbestos or air, while the opposite sides are connected by copper screws or wire. The current enters first through the first anode hung by itself, passes then through the electrolyte to the cathode of the first pair, continues through the connections to the anode with which it is bound, passes from this through the electrolyte to the cathode of the second pair, and then through the connections to the anode of the second pair, passes through the electrolyte to the cathode of the third paid, and continues in this way till it reaches the cathode hanging alone at the end of the bath. From here the current passes to the first anode of the following bath, and returns to the negative pole of the dynamo machine along parallel arranged baths.

The best arrangement is to have two wooden vats, one inside the other, which forms the bath. The space between the vats is filled with some material, such as asphalte or cement, which prevents the percolation of the electrolyte. The lugs of the anode plates rest either directly upon the longer sides of the bath, or on caoutchouc or wooden laths, or on some similar non-conducting material.

The first anode of the bath is connected with the positive pole of the dynamo machine by means of the conducting rod. The first cathode plate is connected with the second anode plate, either by means of copper bolts or by copper rods and copper plates. Between the two plates there is a small space. The second cathode plate is connected with the third anode plate in the same manner.

In a similar way all the following cathode and anode plates are connected in pairs. The last cathode plate, which is alone, is connected with the negative pole of the dynamo machine by means of the negative conducting rod. The separate pairs of plates are kept apart from each other by glass or porcelain buttons, which are fastened at a suitable distance to the inner long side of the bath.

If several baths are used, one following the other, the last cathode of the first bath is connected with the first anode of the following bath; while the last cathode of the last bath of the system is in connection with the negative pole of the dynamo machine. If, however, the baths are arranged parallel to each other, each bath has its special connection with the positive and negative pole of the dynamo machine.

In the aforementioned arrangement, the current passes to the first anode, then goes through the electrolyte to the first cathode (of the first pair of electrodes), where the copper is precipitated, while SO_4 is at the anode; it then passes through the conductor of this couple to the second anode, then through the electrolyte which is decomposed in a similar manner to the second cathode (of the second pair of electrodes), passes through the conductor of the third pair to the third anode, and so on to the last cathode, from which it takes its way through the negative conductor to the negative pole of the dynamo machine. By this system, which is in use in Anaconda (Montana) and in Durango (Colorado), less copper is necessary than by the parallel arrangement of electrodes in separate baths.

The baths are often arranged one after the other in steps so as to facilitate the circulation of the liquid. The solution flows out of a collecting vat at the head of the series, through a leaden syphon into the first bath; the lower portion of the pipe rests horizontally on the bottom, and is perforated for the exit of the solution. From the upper bath the solution flows in a similar manner to the next lower one, and flows finally from the lowest bath into the lower collecting vat, from which it is pumped to the upper collecting vat, when it circulates again through the series of baths.

The baths may lie pretty closely together, but there must be sufficient room between every row of baths to enable one to work at both long sides of the vats.

The circulation of the solution, as already mentioned, must be lively. The thickness and length of the conductors of the current between the dynamo machine and the baths depend on the tension and intensity of current generated by the machine, as also on the number of baths in the system. They must be thicker and shorter the greater the intensity of current. With a known electric installation, one chooses a conductor of such a cross section that there is a square centimetre for every 40 to 120 ampères—*i.e.*, 0.4 to 1.2 ampères for every square millimetre.

The copper plates precipitated on the cathodes are less thick than the anode plates. The process of winning copper electrolytically has the disadvantage that the plant is expensive, that the precipitation of the copper at the cathode, and consequently the solution of the anode, takes place comparatively slowly, so that the copper remains in the bath for a long time as dead capital; and that, especially with impure sorts of copper, it is frequently necessary to renew the electrolyte. These disadvantages are in most cases more than counterbalanced by the good quality of the copper produced, and the value of the anode mud containing the precious metals.

TIN TICKETING.

A TICKETING for tin ores was held at Redruth, on Tuesday, with the following result:—

VALUES OF ORES SOLD BY EACH MINE.

	Tons cwts.	Per ton.	Value.
Dolcoath No. 1	5 0	£46 17 6	£234 7 6
do No. 2	15 0	44 7 6	665 12 6
do No. 2a	15 0	44 10 0	667 10 0
do No. 2b	15 0	44 15 0	671 5 0
Carn Brea No. 1	13 0	39 2 6	508 12 6
do No. 1a	12 0	38 15 0	465 0 0
do No. 1b	12 0	39 2 6	469 10 0
do No. 2	3 0	19 15 0	59 5 0
do b	2 0	31 5 0	62 10 0
Tincroft	15 0	39 12 6	594 7 6
do	14 0	39 5 0	274 15 0
do	3 0	18 17 6	56 12 6
South Frances No. 1	13 0	42 15 0	555 15 0
do No. 1a	12 0	43 0 0	516 0 0
Wheal Basset No. 1	19 0	45 7 6	862 2 6
do No. 2	3 10	35 0 0	122 10 0
East Pool No. 1	18 10	38 12 6	714 11 3
do No. 2	2 0	19 10 0	39 0 0
Phœnix United No. 1	16 0	42 15 0	684 0 0
do No. 2	1 0	27 5 0	27 5 0
Killifreth	13 0	42 10 0	552 10 0
West Kitty	12 0	45 15 0	549 0 0
Wheal Agar	10 0	37 17 6	378 15 0
South Condurrow	8 0	45 7 6	363 0 0
	252 0		£10,093 16 3

Average price per ton £40 1s. 1d.

AVERAGE PRICES PER TON.

June 19	£39 5 6	August 24	£38 0 8
July 3	38 13 9	August 28	39 17 11
July 10	37 5 4	Sept. 11	40 10 11
July 17	38 4 11	Sept. 25	40 1 1

STAVELEY COAL AND IRON COMPANY (LIMITED).—The 31st ordinary general meeting of this company was held at Sheffield, on Tuesday.—Mr. Charles Markham, on the motion of Mr. H. D. Pochin (the Chairman), who is recovering from a recent illness, took the chair. In moving the adoption of the report and accounts, the Chairman stated that the net profits from the various business operations and investments of the company amounted to £39,639. This was a good deal less than in former years, chiefly owing to the disastrous coal strike of last year. The directors felt bound to continue their manufactures right through the miners' stoppage, although the cost of doing so was exceptionally heavy.—Mr. Edwin Beddow, who seconded the motion, spoke very hopefully of the prospects of the business. The motion was carried unanimously.—On the motion of Mr. Thomas Kidley, a dividend was declared of £2 per share on the A and C shares, and of 6s. 8d. per share on the B and D shares. The retiring directors, Mr. Thomas Kidley and Mr. J. B. Barrow, were re-elected, and Messrs. Collier were reappointed auditors. The meeting closed with a vote of thanks to the Chairman.

SPECIAL CORRESPONDENCE:

COLONIAL AND FOREIGN.

OUR PARIS LETTER.

South African mines.—Speculation in copper.—Advanced prices of copper.—The zinc syndicate.—A new mineral discovery in Spain.

THE market for gold mining scrip is less active at the present moment, and prices all round are perceptibly weaker. Robinsons are liable to frequent fluctuations, and, when speculators are not engaged in forcing up values, they naturally have a tendency to drop. During the past week the value of these shares has fallen 5 francs, but Randfonteins and Langlaagtes are fairly upheld. This quietude in speculation is rather favourable than otherwise, as it is impossible for values to advance continually without danger of a sudden reaction, which may have a serious effect upon the position of this class of scrip. The public can see that the Rand mines do not offer much scope for any reckless speculation, and they are, consequently, more ready to take up the scrip as an investment. Now that mining is carried out in the Transvaal upon a systematic scale the dividends vary little from year to year, and French investors look upon this as a sort of guarantee of safety. So far as the French market is concerned, it is not likely that the Rand mines will ever be subject to anything in the nature of a "boom." The Champ d'Or scrip occupies an excellent position upon the Paris Bourse, and holders show a growing disposition to keep the shares of this concern in hand.

Copper has been speculated in very considerably during the past few weeks, and its movements are quite inexplicable. No doubt the fact that the syndicate of producers seems inclined to continue its late arrangement for limiting output has something to do with the present stronger position of the metal, but it cannot be overlooked that the stocks in Europe, and especially in America, are quite large enough to militate against a permanent rise in values. It is certain, moreover, that the production in the United States tends constantly to increase, notwithstanding the arrangement come to for a reduction of output, and as mineowners are not at present bound down by any penalties to keep their yield within certain limits, it is to be presumed that any advance in quotations will see fresh supplies arriving on the European markets. Under these circumstances it seems probable that speculators are relying chiefly upon an early increased demand for the metal from the East. It is, of course, quite possible that China and Japan will retain heavy supplies of copper for repairing their armaments, but it is not easy to see to what purposes the metal can be applied. The home consumption cannot be expected to improve until the general trade position shows more activity, and even then the effect will be merely to strengthen prices without resulting in any considerable advance. A recovery is likely to be sufficiently pronounced to favour the carrying on of mining operations at a reasonable profit, but there is no hope of values rising to such a level as to allow of any considerable increase in the output. It is difficult, therefore, to understand the manœuvres which have resulted in the prices of copper in Paris advancing 5 francs during the past few days. Upon the other hand, "best selected" is rather cheaper in Paris than in London, but this is the exception to the general rule.

The proposal to prolong the syndicate of zinc producers, which comes to an end in December next is giving rise to a good deal of discussion. The position of the producers has changed so much since the formation of the syndicate, in 1855, that it is considered doubtful whether the combination will continue to be workable. The syndicate is composed of 31 companies, of which nine are Franco-Belge, ten Silesian, five Rhenish, and seven English. The total production in 1891 was 275,327 tons, made up as follows:—118,003 tons in France and Belgium, 90,864 tons in Silesia, 39,811 tons in Rhineland, and 26,644 tons in England. This represents 93 per cent. of the entire European output of zinc. The difficulty which the syndicate has now to face is the growing production of zinc in the United States. The yield of the metal in Europe has relatively progressed only slightly since the formation of the syndicate, and last year was 301,110 tons, an increase of less than 50,000 tons upon the figure for 1885. In the same time, the production of American zinc has increased from 36,325 tons to 71,030 tons, and there is every prospect of this quantity being considerably augmented. During the past two years the price of zinc has fallen off one-third as compared with its highest quotation, and it is feared that if supplies are delivered from America the value of the metal will become still more unremunerative. Under these circumstances most of the companies constituting the syndicate are anxious that it should be prolonged, and that the output of the different concerns should be increased in order to compensate them for the lower values. It was reported that the Malfidano Works had already given in their adhesion to the renewed syndicate, but there is reason for believing that if the rumour is not altogether devoid of foundation, it is at all events premature. It is stated in some quarters that the Malfidano Works would have no interest whatever in joining the syndicate. They are already engaged under an agreement with the Vieille Montagne to limit their production to 6000 tons, and this is sold by the Vieille Montagne, who themselves produce 55,000 tons of zinc a year. It is likewise argued that there is no need for any increased output while the galvanised iron trade remains in its present condition of stagnation. So far the steps that are being taken for renewing the syndicate have not had any perceptible effect upon zinc prices, which are still maintained at their recent level.

An important discovery of lignite in Spain, which has recently been made, is all the more valuable, as that country possesses scarcely any other deposits of combustible mineral. For some time past lignite has been known to exist upon the slopes of the Pyrenees, but though an attempt was made to work them 20 years, nothing has been seriously done to turn them to account. Further attention will no doubt now be given to these deposits by the discovery of a French engineer, who has found what he believes to be an inexhaustible bed of this mineral. He estimates that there are no less than 40 million tons of lignite upon the Spanish slope of the Pyrenees. Some of the measures have a thickness of 10 metres, and as they nearly all outcrop they can be worked by lateral galleries. The quality of the combustible is much superior to that found in France, and all that is necessary for their working is the construction of about 60 kilometres to Barbastro

The LIST WILL OPEN on MONDAY, 1st OCTOBER, and CLOSE on WEDNESDAY, 3rd OCTOBER, at Four o'Clock.

Particular attention is called to the fact that this property is a going concern, and fully equipped with machinery; and also that the cash consideration is very small, being only £8500.

THE CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA, LIMITED.

(Incorporated under the Companies' Acts, 1862 to 1890.)

CAPITAL - - - £90,000, DIVIDED into 90,000 SHARES of £1 EACH, of which

25,000 SHARES—£25,000—ARE NOW OFFERED FOR PUBLIC SUBSCRIPTION.

Payable as follows:—2s. 6d. per Share on Application, 5s. per Share on Allotment, 5s. one month thereafter, and the Balance, as required, in Calls not exceeding 2s. 6d. per Share at intervals of not less than one month.

OF THE 25,000 SHARES NOW OFFERED FOR SUBSCRIPTION, APPLICATIONS HAVE ALREADY BEEN RECEIVED FOR A LARGE NUMBER. NO ARRANGEMENT HAS BEEN REQUIRED OR MADE FOR UNDERWRITING ANY PART OF THE CAPITAL.

DIRECTORS.

THE MACLAINE OF LOCHBUIE, J.P., D.L., Lochbuie Castle, Argyllshire.
FREDK. E. HARMAN, Esq., F.G.S., F.C.S., M.I.M.M., Beaconsfield, Ewell Road, Surbiton.
LT.-COL. F. HENDERSON, 51, Belgrave Road, Belgravia, S.W.
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ARTHUR DEWAR, Esq., Advocate, Edinburgh.

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Brokers—*Edinburgh*—Messrs. H. GILMOUR & SHAW, 18, St. Andrew Square.
London—Messrs. LAING & CRUICKSHANK, Stock Exchange and 3, Drapers' Gardens, E.C.

Solicitors—Messrs. HAMILTON & BAIRD, 28, Renfield Street, Glasgow.
Messrs. PARKER & PARKER, Perth, Western Australia.

Auditors—Messrs. A. & J. ROBERTSON, C.A., 33, Charlotte Square, Edinburgh.

Managing Director—*ALBERT F. CALVERT, A.I.M.M., F.R.G.S. F.R.S. of A., &c., &c.
* Will join the Board after Allotment.

Consulting Engineers—Messrs. BAINBRIDGE, SEYMOUR & CO., St. Helen's Place, London, E.C.

Secretary and Offices—DAVID W. MARWICK, LL.B., W.S., 14, Hill Street, Edinburgh.

London Office—47, OLD BROAD STREET, E.C.

ABRIDGED PROSPECTUS.

OBJECTS OF THE COMPANY.—This Company has been formed to acquire and work the "Coongan" Mine, situated in the Pilbarra District, Western Australia. This property has the advantage of being a GOING CONCERN, equipped with Plant, and already proved to a depth of 121 feet. The Company will also prospect, acquire, develop, and work gold, precious stones, and other valuable mineral properties in Western Australia.

DESCRIPTION OF PROPERTY.—The property consists of an 18-Acre Gold Mining Lease held under the West Australian Gold Mining Act direct from the Government, and is situated on the Marble Bar Gold Field in the North-Western District, close to the Coongan River. The Mine is fully equipped with Plant and Machinery capable of treating over 100 tons of Ore a week, nearly £10,000 having been spent by the present owners in opening up and developing the Mine and erecting Plant. There are three well-defined Reefs on the property, one of which has been proved over 1000 feet in length to a depth of 121 feet, and averages from 4 feet to 7 feet in width. There are also several Counter Lodes intersecting these Reefs at right angles.

QUALITY OF ORE—WATER AND TIMBER SUPPLY.—The Ore is free milling, there is a good supply of Water, and Timber is plentiful—all matters of the highest importance in securing economical working. Over 1000 tons of Ore have been extracted from the Mine, which have given over two ounces to the ton, while a large quantity of Ore from No. 2 reef has given four to five ounces. The following cablegrams, which have lately been received from Mr. A. S. Roe, Solicitor to the Union Bank of Australia (Roeburne Branch) explain the present position of the works:—July 4th, 1894.—"Coongan Mine has developed a large body of high-grade Ore; 500 tons milled gave over two ounces per ton." August 3rd, 1894.—"Reef proved to a depth of over 121 feet. The width of the reef is 5 feet. Stone averages two ounces of gold to the ton. The Mine looks splendid." August 28th, 1894.—"Coongan. This week's run 100 tons; result 230 ounces." The following cabled Report, dated 15th September, 1894, has been received at the London Offices of this Company from Mr. NEIL GALBRAITH and Mr. J. CHURCH, the Mine Manager, who have just returned to Roeburne from a visit to the property:—"Coongan Mine Lode, 7 feet. Estimate of Ore reserves, 153,000 tons. Over 1000 treated, 2 ozs. per ton. The loss in tailings in consequence of there being no concentration works, 50 per cent. The Shaft has been sunk 100 feet. Water in any quantity obtainable; expenditure £200. New pump boiler engine, 40 horse-power; two Huntington Centrifugal Roller Quartz Mills are in good working order—can crush 100 tons per week. Large stock tools and fittings."

VALUE OF ANNUAL PRODUCTION AND ORE RESERVES.—The intention of the Directors is to increase the present milling capacity to 250 tons weekly at once, in accordance with the recommendation of their Engineer, and to add thereto as the Mine opens up. From the last cabled Reports it will be seen that there is enough Ore reserves to last ten years, even when the capacity of the crushing plant is doubled as proposed. Taking this as worth only one ounce per ton (less than half the value of the 1000 tons crushed to date), the value of the Quartz is considerably over HALF A MILLION STERLING. Even at the present rate of working and yield, the Gold produced will give a gross value of £45,000 PER ANNUM, which, after deducting ample working expenses, should leave a VERY LARGE MARGIN for DIVIDENDS.

REPORTS.—The foregoing statements are based on the Reports and information of Mr. Neil Galbraith; Mr. Emil Haaben, Mining Engineer and Assayer, late Manager, Clyde Chlorination and Smelting Works, Sydney; Mr. J. H. Church, Manager, Coongan Gold Mine; Mr. Samuel Barrell, Mine Manager, of Ballarat; Mr. A. F. Calvert, A.I.M.M., and others; copies of which Reports accompany the Prospectus, and to which the special attention of investors is directed.

MR. CALVERT'S SERVICES AND DISCOVERIES.—Besides the above property, the Directors have secured the right of acquiring several important discoveries made by Mr. A. F. Calvert in the course of his explorations, 1890 to 1893. The most valuable of these he proposes on his return to the Colony to secure on behalf of this Company as also any others he may make in his further exploration of this auriferous district. These, when taken up, will become the property of the Company, and will add, it is expected, considerably to its resources and ultimate profits. It is not, however, the present intention of the Directors to work such properties themselves, but to dispose of them as opportunity offers, so that the Company will in reality become *quoad* these, a parent Company. Mr. Calvert, who is recognised as one of the leading authorities in connection with the exploration of Western Australia, has such confidence in the future of this undertaking that he stipulates that the consideration for his discoveries shall be in FULLY PAID-UP SHARES ONLY. He has also declined many offers and inducements to associate himself with other West Australian Companies in order to keep himself free, so as to give his whole energies to further the interests of the undertaking, which he expects will take a foremost position in one of the greatest and richest Gold Fields ever discovered.

PURCHASE PRICE, &c.—The price to be paid for the "Coongan" Mine and right to the Calvert Discoveries, as above, is £73,500, payable as to £8500 in cash, and as to the balance in fully paid up Shares. The Purchase will include all Plant and Machinery, and all Ore at surface. IN THE OPINION OF THE DIRECTORS, THIS COMPANY PRESENTS AN OPPORTUNITY TO INVESTORS IN THE GOLD MINING INDUSTRY OF A NEW COLONY WHICH SELDOM OCCURS, AS, WITH THE PLANT AND MACHINERY NOW AT WORK, IT OUGHT QUICKLY TO BECOME A DIVIDEND-EARNING CONCERN. The Vendors, or one of them, will pay the expenses of and incidental to the promotion of the Company up to and including the first general allotment of its Shares, including brokerage, if any, but excluding Government Stamp Duties.

CONTRACTS, &c.—The only Contracts to which the Company is a party are as follows:—(1) A Contract, dated the 18th day of August, 1894, between John Wallace of the one part, and William Milligan, as Trustee for the Company, of the other part; and (2) a Contract, dated the 28th August, 1894, between Albert F. Calvert of the one part, and William Milligan, as Trustee for the Company, of the other part. Contracts may have been entered into with third parties as to the formation and registration of this Company, but to none such is the Company a party. Applicants for Shares will be deemed to have had notice of these latter Agreements, and to have waived their right (if any) to any particulars of such, whether under Section 38 of the Companies' Act, 1867, or otherwise. Copies of the Memorandum and Articles of Association of the above two Contracts and of the various Reports, together with Plans and Specimens of Ore from the property, may be seen at the Edinburgh and London Offices of the Company.

PROSPECTUSES and FORMS of APPLICATION may be obtained from the BANKERS, BROKERS, and SOLICITORS, and at the EDINBURGH and LONDON OFFICES of the COMPANY; or applications written according to the following form may be lodged.

APPLICATION FOR SHARES.

TO THE DIRECTORS OF THE CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA, LIMITED.

Having paid to your Bankers the sum of £....., being 2s. 6d. per Share, payable on application for..... Shares of £1 each, I request you to allot me that number of Shares, and I hereby agree to accept the same, or any smaller number that may be allotted to me, upon the terms and conditions of the Prospectus, dated 27th September, 1894, and the Memorandum and Articles of Association of the Company, and I authorise and request you to place my name on the Register of Members in respect of the Shares so allotted to me; and I undertake to pay the further instalments upon such allotted Shares as the same shall become due.

Usual Signature .....
Name (in full) .....
(Mr., Mrs., or Miss)
Address (in full) .....
Profession or Occupation .....
Date.....1894.

MEETINGS OF MINING COMPANIES.

ISLE OF MAN MINING COMPANY.

Annual meeting.—Protest against excessive royalty.

SPECIAL REPORT FOR "THE MINING JOURNAL."

THE 41st annual general meeting of the Isle of Man Mining Company (Limited) was held at the Grosvenor Hotel, Chester, on Tuesday.—Mr. FREDERICK NORTH, Chairman of directors, presided; and there were also present Messrs. H. Churton, T. H. Dixon, James Mackee, Frederick Potts, and E. H. Perrin (directors); John Johnson, Bryan Johnson, G. R. Griffith, C. H. Poole, J. B, Light, R. Bradshaw Smith, Robert Roberts, Alfred Barker, John Clarke, and R. Townshend Wickham (shareholders), R. L Barker (secretary), and Captain W. H. Kitto (superintendent of mines). The directors submitted their report which has already been published in these columns.

The CHAIRMAN, in moving the adoption of the report, regretted that their dividends were so exceedingly low this year, but it was from no fault of the directors or of the mine. Their position, if it had not been for the low price of lead and silver, was better than it had been for some time. Beckwith's engine shaft was now down to 275 fathoms, and they had commenced to open out levels at that depth. They would be very much disappointed if, during the current year, there was not a good length of profitable ore ground discovered. The sinking of Pott's shaft, which had been a heavy drain on the revenue of the company, was daily becoming more advantageous to the profitable working of the eastern part of the company's property. It was, however, most disappointing to find that notwithstanding the returns had exceeded the preceding year by 50 tons, and the expenditure had been less, the profit was £3698 less, which evidently proved that the falling off was entirely due to the depressed state of the lead and silver markets. The fall alone in the price of their ore as compared with last year was 25s. per ton, making a difference in their profits of £5875, or equal to an additional 8½ per cent. on the capital of the company. He mentioned the fact to prove the advisability of opening out and developing the mines in a systematic manner. Their working expenses last year were less than they were in 1887, when the mine was not nearly so deep and extensive, and also with a less output of 800 tons, but the ore at that time realised £10 15s. 6d. per ton. It was satisfactory to note that the recent slight improvement in the price of lead already showed an increase of about 17s. per ton on the last quarter, which was encouraging. If this improvement continued they would be enabled to resume their late dividends of 12½ per cent. The following statement showed the fall in the price of lead during the past six years:—

Year.	Output.	Price of lead.	Gross receipts.
1889 ...	4,222 ...	£10 17 6 ...	£45,968
1890 ...	4,060 ...	11 5 3 ...	45.723
1891 ...	4,550 ...	10 7 6 ...	47,224
1892 ...	4,650 ...	9 7 0 ...	43,485
1893 ...	4 650 ...	8 8 9 ...	39,231
1894 ...	4,700 ...	7 3 9 ...	33,725

From 1889 to 1892 the years were all exceedingly good, and they paid 12½ per cent.; but this year, though the output was larger than ever before in the history of the mine, the fall in prices compelled them to reduce their dividends to 2½. The quantity of silver produced was 84,589 ounces, an increase on 1863, the average of silver per ton of ore being 17 ounces 15 dwts. 23 grains. The greatest economy had been exercised during the year, and great credit was due to Captain Kitto for his exertions. (Applause.) The directors had long been in communication with the Commissioners of Woods and Forests as to a reduction of royalty, but though a slight concession had been made it was not nearly enough to meet the present emergency.

Mr. BRADSHAW SMITH said the returns made to the shareholders were far from satisfactory, and he was firmly of opinion that they ought to make better terms with the landlords. The royalty was much too high to allow them to keep up the mine in an efficient condition. Whereas last year it amounted to the excessive sum of £2206, the shareholders received only £1750, and he maintained that the time had come for them to protest. The company had made this property a profitable concern, and it was only right that due regard should be paid to them for their exertions. The directors, he considered, were paying as much or more attention to the interests of the Crown than to the interests of the shareholders, and he thought more stringent steps ought to be taken to secure a fair proportion of the profits.

The CHAIRMAN: I quite agree with all you say as to royalty, but we have done all we possibly can.

Mr MACKEE said the directors had pointed out again and again to Mr. Stafford Howard that the Crown were making more than the company. If Mr. Smith could suggest some means of forcing the Government, the directors would be glad.

Mr. SMITH: If this is allowed to continue, the result will be that lead mining will become a decaying industry in this country. There is no inducement to anyone to open up new mines with these royalties and the low price of lead.

The CHAIRMAN remarked that as the average price of lead had been under £8, the company would get the benefit of the reduction of the royalty to 1-20th, instead of 1-12th, from April last.

Mr. LIGHT quite agreed with Mr. Smith that it was most important to impress upon the landlords the necessity of reducing the royalties, or the lead mines would become a thing of the past. He asked what was the prospect of raising coal in the Isle of Man. (Laughter.)

Captain KITTO replied that Mr. Light ought to know more about that question than anybody else. (Laughter.)

The report and accounts having been adopted, the CHAIRMAN proposed that a dividend be declared at the rate of 2½ per cent. on the ordinary share capital, of which 1s. per share had been paid in anticipation, and a dividend at the rate of 7½ per cent. on the preference capital.

This was seconded by Mr. ROBERT ROBERTS, and carried.

On the proposition of Mr. BRYAN JOHNSON, seconded by Mr. POOLE, the three retiring directors, Messrs. Dixon, Mackee, and Potts, were re-elected.

Mr. Charles Coppack was also re-appointed auditor, and a cordial vote of thanks was passed to the Chairman, directors, and officials of the company for their services during the past year.

NEW PRIMROSE GOLD MINING COMPANY.

A valuable mine.—A great output.

The meeting of this company was held on August 28, Mr. STROYAN presided.

The CHAIRMAN, after some prefatory remarks, observed he remembered the time, some three years ago, when Mr. Hamilton, their then manager, told them, through him, that within a given time the output of the company would be 4000 ounces per month. He was severely criticised because he had the hardihood to tell them that he believed Mr. Hamilton's assertion. The output reached 4000 ounces within the specified time, and to-day it was close on 8000 ounces. In the first place, he drew their attention to the mine which they were so fortunate as to own. During the 12 months under review they had obtained 90,000 ounces of gold, of the total value of £305,000. The profits made during the year amounted to £116,262. They were aware that the board always made a liberal allowance for depreciation, and after allowing £13,167, the profits were £103,094; this did not include the premiums on shares sold—which were offered, as they always had been by the board, to the shareholders—which amounted to £26,611. During the year two dividends had been paid, numbers eight and nine, of 20 per cent. each, making 40 per cent. in all for the year, which absorbed £78,567. Considerable additions of great value had been made to the machinery and plant, the amount spent being £57,892. Large additions had been made to the stores on hand, which were increased by £6812. With regard to the cost of working for the year, the total cost of mining and milling was 19·731s., as against 20·109s. for the previous year. The reduction was not a large one, but they must bear in mind that during the past three years the cost of working had been gradually reduced. With regard to the value of their mine, for him to say anything on the subject considering the figures they had before them, would be like gilding fine gold. A mine that turned out £305,000 worth of gold in one year spoke for itself. The manager's report showed that there were 71,000 tons of ore fully developed and 280,000 tons partially developed above the ninth level, and all, the manager informed them, of a value of over 8 dwts. on plates. They had two main shafts, the Primrose and Moss Rose shafts, already down, and were working with the rock drill on this, the ninth level in both shafts. Five winzes were also down almost to this level which would give 14 working faces. With 40 rock drills they would readily understand how rapidly development under the circumstances could be made. With regard to the surface plant and machinery, this was about as perfect to-day as it could well be. A large amount had been spent under this head, and was spent under the supervision of Mr. John Hays Hammond, their consulting engineer. The total value of machinery and plant to-day was £162,877, as given in the accounts before them. A few of the items on which heavy expenditure had been made were:—A new 60 stamp heavy type battery, which was lying on the ground paid for and ready for erection, and which they expected to run by January 1 next. There were large alterations to the Primrose main shaft, and the full and complete equipment of the Moss Rose main shaft. They had erected a plant consisting of 15 vats for the settling of their tailings, which would obviate the loss and expense incurred under the old tailings' dam system. This plant was working very satisfactorily, and they now hoped to save 85 to 90 per cent. of their tailings, as against, say, 60 per cent. under the old system. The Primrose property had been greatly increased in area in the acquisition of adjoining properties. They first determined to secure their own deep levels—that was to say, their legitimate deep levels—which they did by acquiring the South Primrose Company. This property, which to-day was of enormous value, Mr. Barnato and he (the Chairman) bought for the trifling amount of 8,000 Primrose shares, which then stood in the market at £1 2s. 6d. Having acquired the company's deep levels, the directors then set about acquiring their eastern neighbour, the Moss Rose, which company, he told them now, was even richer than the Primrose itself. In acquiring the Moss Rose they did not alone acquire the Moss Rose but took good care to also have its legitimate deep levels, which they acquired in the South Moss Rose and the Moss Rose Deep Level. Having done so, to complete their programme they acquired the May Deep Level, and they were enabled to secure that property on, he thought, fair terms. Besides the acquisition of that property, he might also mention that they acquired the Moss Rose Extension for a very trifling sum, and they made a profit of something like four times the amount they paid for the property out of tailings on the ground alone. He thought they would admit the directors had been fully awake to the acquisition of good properties in the neighbourhood, and to extending the company's. They had no useless property or extreme deep levels, which were known on these fields by the designation of "padding." It was all productive property. They would realise the full value of the Primrose property when he told them that from east to west the company had an extent of reef of about a mile in length—not deep levels, but reef all opened, and reef that would be productive from one end of the mile to the other within the next eighteen months. They would realise the value of the property when he told them that the magnificent results they had got up to date had not been taken from the entire property. All they had mined to date had been taken from the original Primrose Company. When the new 60 stamps were at work, making 160 stamps altogether—and it might be they would also use the 30 stamps acquired from the May Deep, which were in splendid condition, making 190 stamps—when that mill was running, and perhaps 10 stamps more to make up the 200, instead of hauling from the Primrose proper they should be working the full extent of the mile of reef. They could form some idea of what the production of that mine would be.

GLENCAIRN GOLD MINING COMPANY.

A period of preparation.

At the meeting on August 28, Mr. STROYAN, who presided in the absence of the company's Chairman, Mr. Barnato, referred to the alteration in the date of closing the accounts from November 30, an extremely awkward date, to June 30. The 19 months had been a period of preparation for the future—a future with excellent prospects, he thought he could tell them—than of working for the present. During the time under review they had placed the Glencairn Company in a position that it never was in before. The mill was closed down for four months, while they were converting the old light battery into a new 50-stamp heavy battery. While they were equipping and finishing the new main shaft it was necessary to work on the abandoned ore in the upper levels, and, consequently, they made no profits, as the directors expected. Notwithstanding the time they were idle, and as good as idle, and taking into consideration that during that period all expenses of management, &c., were running, the directors had still to lay before the shareholders what he thought the very satisfactory profit, under the circumstances, of £32,529. That amount could not be taken as a criterion of what the Glencairn Company ought to do, nor could it be taken as a criterion of what the Glencairn Company would be made to do from this time forth. In addition to that profit, as they knew, they gave to shareholders 25,000 shares at 30s., producing £37,500. When the accounts closed this transaction had not been closed, and they had then received £32,552, leaving a balance of £4947 still to be paid, which was paid on the first week, he thought, of July. Of that money they had expended, in machinery and plant, £54,030. If they would refer to the report they would get full particulars of that plant. The plant and machinery of the Glencairn Company was valued at £163,552, and was, he thought, very complete. They would notice that, taking their assets and liabilities at that time—viz., June 30—they would find a difference of £11,500, practically cash in hand, and he was pleased to tell them that the secretary, having made up the accounts and estimates to the end of the present month, at that time—viz., three days hence—they should have something like £18,000 in hand, which he considered was a better position than most of them expected to find the company in. Shareholders knew of the old arrangement which the Glencairn Company and the May Consolidated Company had had for some years with Knight's Company—the Witwatersrand Company—by which they had been paying that company a very heavy rent indeed—a position that was forced on this company at the time through necessity. He might tell shareholders that that contract was about to expire, and unless they could renew it at less considerably than half, they had made preparations to do without the Knight's Company, and therefore in future they could reckon that item would be very considerably reduced. They had written off everything that stood to the debit of development account, simply to clear the boards for the future, and enable them to start with a clean sheet. With regard to the mine, which he thought the main item to deal with in a gold mining company, he need only say that the mine during the year has produced 40,000 ounces of gold of the value of £134,000, and the work for the time under review showed an average over the plates of 7½dwts. Mr. Wiltsee, the late manager, in his report, stated that the yield in future from one end of the mine to the other would be rather over 8 dwts., and he (the Chairman) was pleased to tell them that Mr. Pope, who had now taken Mr. Wiltsee's place, fully confirmed that, and said the mine was over an 8 dwts. mine from the plates. The cyanide plant had been at work six months, and the yield had averaged 4·80 dwts., or nearly 5 dwts. Well, if they took the 8 dwts. and the 4·80 dwts., he thought there were very few better mines on the Rand. With regard to the development, he might tell them that the mine was in a very good position indeed. They had sunk and thoroughly equipped with all the latest appliances, including sorting floors, a new main shaft, which was down 320 feet to the fifth level. Above the fifth there were two levels of 130 feet each, still intact. They had increased their electric plant, and they were pumping from the lower levels to some extent by electric pumps, and bringing to the surface with the Cornish pump. They had now a rock-drilling plant, and it was working satisfactorily and in full swing. Cyanide plant had also been erected since the shareholders last met, and had now been working with satisfactory results for the last six months. The mine, the plant, and the buildings were in first rate order, and the amount they had expended on buildings was very considerable. Mr. Pope had now been in charge for a month, and as they saw from the report of the Simmer and Jack directors the other day, he had resigned the position of manager of the Simmer and Jack of his own accord, to take over the management of the Glencairn Company, and he was pleased to tell the meeting that Mr. Pope was very highly pleased with the mine.

The report was adopted, as also the declaration of an interim dividend of 5 per cent.

THE AFRICAN GOLD RECOVERY COMPANY, LIMITED.

An excellent state of finances.—The company's patents.

The ordinary general meeting of the shareholders of the African Gold Recovery Company (Limited) was held at the Cannon-street Hotel, on Thursday, the chair being occupied by Mr. CHARLES MCCULLOCH.

The SECRETARY (Mr. L. J. Langmead) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen, I beg leave to move: "That the directors' report and accounts for the year ended June 30 last be accepted as read; that same be adopted; and that a dividend of 10 per cent., free of income tax, as recommended, be paid on October 23 next." The directors desire to recognise and to thank shareholders for the forbearance and equanimity they have displayed in circumstances when it has been often impossible, and oftener impolitic, in the interest of the company, for the directors to satisfy their natural desire for fuller information of the progress of affairs. The events which have supervened have been so contingent on other influences that even for the best informed to have expressed themselves might have been misleading. The importance of our patent for the mining industry, and the benefits it brought to the miner, were such that few mines could be worked without it. (Applause.) The returns of the richer mines were greatly enhanced by its adoption; and its adoption has formed the feature in their share values. Those which had proved unprofitable have by it been made payable, and in most cases highly profitable enterprises; while it has facilitated the opening up of new districts, thus affording scope for new mining industries. In course of time all this was recognised and appreciated on the Rand. Shortly after this time last year certain mining men on the Rand, discerning that there was no alternative to the use of our patent, leagued themselves together to contest its validity, and, if possible, to rid themselves of any payment for its use. They assumed the pretence that our royalty was excessive and pressed unduly on the mining industry. We only ask a fair modicum of the great good conferred, and no one has ever suggested that our charge made the working of the process unprofitable, or proposed to dispense with it, and revert to the style of working before the MacArthur-Forrest process was introduced by us under patent protection. We only ask a small share of the great benefit we have been instrumental in conferring. But they, while recognising that they could not do without the MacArthur-Forrest discovery, grudged us our modicum, and set themselves to try to have all the benefit without paying for it. The leading movers in this combination are parties who had so little faith in the utility of cyanide, that when we started they preferred to sell us their tailings at a few shillings per ton rather than risk the expense of erecting plants for themselves. The tactics of these gentlemen necessitated your directors joining issue in litigation for the purpose of maintaining the patent rights of the company. This litigation has since continued; although, in what had been selected as a test case, our object has been baulked by the defendants pleading a verbal contract, mainly on the ground that we had superintended the fitting up of their plant. The Court has recently found in their favour on this plea, and ordered them to pay royalty, which they had previously refused to recognise. So, to that extent we have distinctly scored, although the main object we had in view has not been overtaken. (Applause.) But the matter cannot now rest, and will come on for trial through another channel—probably one divested of side issues and going directly to the main issue—viz., the use of cyanide, not for dissolving gold, but for "recovering gold from its ore;" which is the sum and substances of the MacArthur-Forrest discovery. Results in Africa, New Zealand, Australia, and America are day by day showing that the application of this discovery is bringing within reach of the miner a production of gold 30 per cent. to 50 per cent. greater than was practicable previous to the discovery disclosed in their patent. The patentees discovered the special affinity of cyanogen for gold, and disclosed to the world how to apply that principle in a practical and economical way for the extraction of gold from ores. This had never been done before. Others never came near it. Some, adopting in theory the principle of the well known electro-plating process patented by Elkington, tried to apply this to the treatment of ores, but their processes were crude and unworkable, and gave no practical recovery of gold. They were tried, found unworkable, and abandoned, and, if not forgotten, were acting the part of beacons to warn men away from research in the use of cyanide for the extraction of gold from ores. They discovered no new facts and conveyed no knowledge not previously disclosed in the electro-plating process. It was only in the light of the knowledge the MacArthur-Forrest patent supplied that those previous publications revived into notice, and even with that light they could never be successfully worked, as described in the publications. To be used they have to be remodelled and converted into the MacArthur-Forrest process founded upon the selective affinity of cyanogen for gold and silver. They were mere theories on the lines of electro-plating, and never were, and never could be, practically used by the mining industry for commercially recovering the gold from ore. We have ransacked America from east to west, from north to south, traced to its source every scrap of report as to use of cyanide for extraction purposes, and not one iota of evidence have we found of such use of cyanide by miners previous to MacArthur's disclosures. (Hear, hear.) Any cyanide previously used was for cleaning the amalgamation plates, and not for dissolving gold for extraction purposes. It was used to dissolve the base metals that fouled the plates, and was supposed not to act upon or dissolve the gold in the ore. Scientific men had long known that most metals, including gold, were acted on more or less by cyanides, and, it was supposed, the baser metals most. Cyanides had been used for laboratory purposes, but no one had discovered and disclosed their selective action and preference for gold, or disclosed how and by what means cyanogen could be availed of by the miner for extracting the gold from his ores. It was reserved for MacArthur and Forrest to discover and to make that disclosure; and but for their discovery and disclosure the economical recovery of what had been waste gold would probably have remained the unsolved problem it had been before the publication of their patent. The geologist may describe

a country as containing auriferous reefs; the pioneer may walk over a reef, and be very near discovering it; the prospector may bore down, and be very near the quartz; but these all fail to discover and make available the gold. Another man comes along, and seeing failures, says—"No good trying there;" and so the crowd pass on, actually deterred and scared away by the antecedent researches. At length a man comes along of more perseverance, of more patience—with more knowledge it may be—and boring deeper, discloses the gold. Tell me, to whom does that gold discovery belong? To the scientist, the pioneer, or the prospector, who disclosed nothing practical and of value; or to him who really discovered and disclosed the wealth? By all laws of justice and fairness, he is the man entitled to that protection which the law in such cases affords. I do not require to elaborate the analogy this bears to Messrs. MacArthur and Forrest's discovery and disclosures. The analogy is complete and emphatic. They discovered and disclosed a fact of great utility to the store of human knowledge. They revealed a means by which the earth's supply of gold can be, and is being, enormously augmented—a fact of supreme importance not surpassed by any discovery of the age. A patent supported by such facts and considerations cannot be lightly disposed of, and might well have been viewed with gratitude as a boon and a blessing. (Applause.) Instead of this, a faction has ranged itself to attempt to undo it in the very country for which it has done, and is doing, so much. Some members of the Transvaal Government perceiving this spirit of hostility and the harassing attitude of the factious opposition; appreciating that it had been the means of restoring prosperity and wealth to the country in its most important industry, when this industry had sunk very low; hearing, also, the oft-echoed cry that a compromise on the basis of a lower royalty was all that was desired by the miners; thought that by Government intervention some compromise, fair and satisfactory to all parties, might be practicable. So did we; and we at once signified our readiness to arrive at a fair compromise, conditional on this being founded on a proper basis to give it stability; otherwise it might prove of no permanently binding nature. To meet this proposition, negotiations took a form which was availed of to raise the outcry that it was proposed to establish a monopoly of cyanide; which, in a sense, is quite true, for that is what a patent amounts to—a monopoly in the use of cyanide for the extraction of gold from ore—a monopoly for a limited period; and we could admit nothing less in this respect than our patent rights award. But as regards rates of royalty, we were, and always have been, open to any fair and equitable arrangement so long as this is in a form that will make it stable and binding on all for a period agreed upon. A patent is for a short term of years, only during which the patentee reaps any remuneration; while the benefit his discovery confers on the community is for all time. Still, we were desirous again, as we had been in 1892–1893, to reconcile all interests as far as we could. But our opponents disclosed none of that disposition to meet us with which a section of the Press had represented them to be animated. Hence these negotiations were of no immediate effect. I hope I have not detained you too long over this part of the business of the company. It seemed to us that the points referred to are those on which you have been most desirous of information, and this I have endeavoured to supply. And now to turn to other matters. During the year several large parcels of tailings have been purchased, and plants erected for their treatment, which now progresses. From the profits adequate deductions have been made towards redemption of these plants. Following up the policy approved of by you last year, the board has acquired further interests in mining properties of a promising nature. We must not expect that every venture will prove a bonanza, but some of them promise so well that we have reason to expect before long they will be in a position to warrant dealing with them in a practical and profitable way. (Applause.) These investments are in mining properties—interests in mining properties, deep level claims, &c., gone into with the best judgment we could bring to bear on the businesss. You will observe that we have treated as profits only amounts actually such, and not those contingent on eventualities. We have debited to suspense account a large sum against outstandings. This is a safe course to follow, and one which we believe you will endorse as prudent. We have not thought it right to swell the accounts by including a very large amount incurred and due by infringers during the past six or eight months. We have strengthened the reserve account towards redemption of patents, &c., by £30,000, bringing this account up to £60,000. The balance at profit and loss, after these deductions, amounts to £28,568 5s. 6d., out of which we propose to pay a dividend of 10 per cent., free of income tax, leaving £11,068 carried forward. Before moving the adoption of the report, I would like to add a word on behalf of the employees of the company both in Johannesburg and in London. They have had a very great deal to do. Latterly we have been going through a very trying time, so that large demands have been made on their labour, and the directors thought it only just and fair to inform the shareholders that these gentlemen have performed their duties to the entire satisfaction of the board, who feel thankful to them for having been so industrious and so loyal in the care of the company's interests. (Hear, hear.) Personally, I have had a great deal to do with the London office, and I should like to make special reference to our secretary (Mr. Langmead) and his assistants—(applause)—who have had a great deal of work thrown upon them of a peculiar nature, and have applied themselves to it in a way which, I am sure, will recommend itself to everybody. (Cheers.) I now formally move the adoption of the report and accounts, and that a dividend of 10 per cent., free of income-tax, be paid on October 23rd next. (Hear, hear.)

Mr. ROBERT SMITH seconded the motion, saying that though the last year's balance-sheet was a good one, the one now presented to the meeting was distinctly a stride forward. In fact, he could say without fear of contradiction that a cleaner balance-sheet was never submitted to a meeting of shareholders. Perhaps there could hardly have been a greater surprise to the shareholders than for them to have received so favourable a report in view of the circumstances in which the company had been placed. The Chairman having dealt with the fact that a number of miners in Johannesburg and the Transvaal had done their level best to fight for number one in despite of number two, he thought it only fair to add that there was a loyal contingent of mineowners in Johannesburg who stood by the company, considered their patents to be good ones, and would be very sorry to see anybody interfere with the just rights of the company. (Hear, hear.) As the Chairman had conveyed, the past year had been a very anxious time, but they were encouraged by the results, and were there that day ready to encounter the labours of another year with increased vigour. (Applause.)

Mr. MACNAMARA enquired what the duration of the patents would be, supposing things went well with the company.

Mr. LEEK read an extract from a financial paper, which, he said, seemed to imply that other cyanide processes were being used in South Africa. The quotation was to the effect that: "The May Consolidated Company has decided to use the Siemen's-Halske cyanide process in connection with the new cyanide works it has constructed."

The CHAIRMAN, in reply, said that the patents in South Africa had still to run another eight years. The cyanide process, to which Mr. Leek had referred, was one of a number of others originated by men who followed in the track of the company.

The motion for the adoption of the report and accounts was then put and carried unanimously.

On the motion of Mr. LEEK, seconded by Mr. HORNE, the retiring directors, Sir Charles Crauford and Mr. Robert Smith, were unanimously re-elected.

The auditors, Messrs. Thomson, Jackson, Gourlay, and Taylor, were unanimously reappointed.

Mr. READE rose to move that a special sum should be voted to the board as a mark of recognition of the arduous work they had performed and the magnificent report they had presented. They would all have gathered from the speech of the Chairman that the duties of the board had this year been harder than ever. The company was not a mining company, but a commercial undertaking of extraordinary success, which would have been an infinitely greater one but for the attacks made upon them in South Africa. People there had not been content with getting 95 per cent. of what had before been worthless; they grudged paying for its use, notwithstanding the great assistance the cyanide process had been to them. In view of the anxiety which the work of the company had thrown upon the board, and the admirable way in which it had been performed, he had much pleasure in moving that 1000 guineas should be tendered to them as a special remuneration. (Applause.)

Mr. LEEK seconded the motion, which was unanimously carried.

The CHAIRMAN returned the sincere thanks of the board to the shareholders for their vote. Without repeating what he had said in his speech, he could assure the shareholders that the work of the board had been very heavy during the past eight months. They had had night as well as day sittings, and, when away, the affairs of the company were constantly in their minds. He might especially remark upon the services of Mr. MacArthur, who had been untiring in his work on behalf of the company.

Sir C. CRAUFORD briefly thanked the meeting for his re-election, and mentioned the immense assistance which the energy and judgment of Mr. Smith had been to the board.

The proceedings terminated with a vote of thanks to the Chairman, moved by Mr. FOWLER.

EAST POOL.

Dividend of 1s. 6d. per share—Captain Bishop speaks hopefully of the prospects.—The lease.

A 12 weeks' meeting of the shareholders was held on the mine on Monday, Mr. HENRY ROGERS presiding, in the absence of Mr. John R. Branwell, who was indisposed.

The CHAIRMAN said that before they proceeded with the immediate business of the meeting he wished to express his regret at the absence of Mr. Branwell, their usual Chairman. He was glad to say there was nothing very serious the matter with him, but he deemed it prudent owing to the weather and other circumstances to stay at home. They all knew Mr. Branwell so well that they would join with him in hoping that he would soon have a return to good health. (Hear, hear.) Those who knew him as his colleague could not but admire his great abilities, tact, and business judgment, and he trusted his illness would be of a very slight character.

Mr. J. H. MAYNE (the purser) read the statement of accounts, which showed:—Debit. Labour, subsist, and dressing cost £6169; merchants' bills, £2584; contribution to Wheal Agar water charges, £75; rents, £70; Stannary assessment, £10; dues, one-fourth profit, £87, less two months' contribution, £80, to cost of sinking shaft, £7; total debits, £8907.—Credit. 220 tons 7 cwts. 1 qr. 4 lb. of tin ore sold at an average price of £35 14s. 3d. per ton realised £7870; copper ores sold, £178; arsenic sales, £1397; discounts, £68; income tax off dues, £4; carriage, £21; one month's contribution towards sinking shaft, £40. The credits totalled £9579, and left a profit on the twelve weeks' working of £671.

The CHAIRMAN said he thought they would agree with him that they met that day under rather favourable circumstances—in fact, much better circumstances than was anticipated a few weeks since. The tin sold during the quarter had been 1 ton 6 cwts. 2 qrs. 9 lbs. less in weight, and the amount in money had been less (£397 3s. 1d.) than at the last account. The reduction in the amount received was owing to the price of tin, and which on the average had been £1 12s. 6d. per ton less than during the previous 12 weeks, otherwise their profit that day would have been about £1000. They had sent to the stamps 304 tons of stuff less than in the previous 12 weeks. The produce of the stuff, so far as tutwork operations were concerned, had been precisely the same as during the previous quarter, but so far as tribute was concerned the produce had been 4 lbs. better. They were raising the same quantities of copper and arsenic, and the difference between these items this and last quarter was only £38. In order to make the dividend they had had to entrench upon their reserve fund, but only slightly, and he thought the shareholders would approve of the course the committee had adopted. They had had to provide for some permanent work in improving their compressor, which had cost them nearly £300, and the reserve fund had been accumulated for purposes of this kind. They had used £160 from profits, so that the actual amount expended from the reserve fund was £99, although they had expended £290 18s. 7d. He thought under the circumstances they would agree with him that great credit was due to the agents, for they had been able to reduce their costs without any sensible diminution in their tin. He had much pleasure in proposing the adoption of the accounts, and that a dividend of 1s. 6d. be declared, payable forthwith. (Applause.)

Mr. WOOLCOCK, who seconded the motion, said he did so with great pleasure.

The motion was unanimously carried.

Captain BISHOP read the agents' report, as follows:—

> The engine shaft is sunk 9 fathoms below the 280 fathom level. We have also set a contract to sink this shaft by 18 men, which will command much greater speed. The 280 fathom level west of crosscut is worth £3 per fathom. We shall as soon as possible commence to sink a winze in the bottom of this level east of the crosscut. The 265 fathom level west of cross cut at present is poor. The 252 fathom level west of crosscut is worth £11 per fathom, and the rise in this level is communicated with the 240 fathom level. The 240 fathom level west of crosscut is worth £13 per fathom.—Stopes on Great and North Lodes: One at the 25[illegible] hom level worth £2 per fathom. One at the 252 fathom level worth £15 per fathom. Two at the 240 fathom level worth £16 per fathom each. One at the 200 fathom level worth £15 per fathom. One at the 180 fathom level worth £12 per fathom. One at the 150 fathom level for tin and copper worth £30 per fathom.—Middle Lode: The 228 fathom level west of crosscut is worth £16 per fathom. We are rising in the back of this level with a boring machine, the rise is up 2 fathoms and worth £18 per fathom. The 212 fathom level west of crosscut is worth £11 per fathom. We have risen 9 fathoms in the back of this level with a boring machine, and are now driving east of rise to communicate with the 200 fathom level, and is worth £16 per fathom. The 212 fathom level east of cross cut is worth £12 per fathom. We are also rising in the back of this level with a boring machine; the rise is up 2 fathoms, and is worth £12 per fathom.—Stopes on the Middle lode. One at the 212 fathom level is worth £12 per fathom. One at the 200 fathom level worth £12 per fathom.—South lodes. The 180 fathom level east is worth £10 per fathom. The 180 fathom level west is worth £3 per fathom. The 150 fathom level east is worth £9 per fathom. The 140 fathom level east is worth £10 per fathom.—Stopes on the South lodes. One at the 190 fathom level worth £12 per fathom. One at the 160 fathom level worth £12 per fathom. One at the 160 fathom level worth £10 per fathom. One at the 150 fathom level worth £13 per fathom. Two at the 90 fathom level worth £14 each.—Tributes. We have 19 pitches working by 65 men; average tribute 9s. 1d. in the £.—CHARLES F. BISHOP, JOHN PENHALE, SAMUEL CURTIS, JOHN BISHOP.

Captain C. F. BISHOP, in supplementing the report, said the one important thing in East Pool was to sink the engine shaft as rapidly as possible, in order to reach the junction of the north lode and the so-called great lode. They had thought it advisable to put in a good pare of men there, and to depart a little from the ordinary way of doing business in that line, and had set 10 fathoms of the shaft to sink by a contractor—one of their own men. He had to employ the other men, had full power to discharge any of the pare, and to take on any fresh men. The men worked in shifts, and when the day men arrived at the bottom, the other men were able to go up in the same cage. They had six men in a shift, and with the arrangements which had been made they would make good progress. They had a very troublesome shaft, the sides occasionally giving out, and had to be timbered. They were now carrying a shaft big enough to admit of timber, and he should be very much disappointed if he could not inform the shareholders at the next meeting that they had sunk the shaft three times as fast as they had done before. They had let it at £34 per fathom, the contractor to put in all the necessary timber for securing the shaft. They also hoped to sink a winze in the bottom of the 280 fathom level, and they hoped to rise in the crosscut and would stope the ground for perhaps 4 fathoms long and 4 fathoms high, and there lay down plant for a steam winch, or two, if necessary. They would then endeavour to attain a junction before they crosscut from the engine shaft. When they were in a position to sink this they would most likely sink it with a boring machine. He would be very pleased to inform them that they had made a splendid improvement, and that East Pool had begun to give a good account of herself. They would make all the efforts possible to attain these two objects. (Applause.) They were putting on the middle lode three rises which would open up a nice piece of ground, and they had great hopes for sustenance from this until they had reached the junction. Though the others gave a considerable amount of promise they had greater prospects in that lode for the moment than in any other. Therefore they hoped to keep improving their reports until they got to their destination. (Applause.)

Mr. H. P. VIVIAN: Can you give any probable time when you will reach the junction?

Captain BISHOP could not possibly tell, because it would all depend on how fast the north road might underlie. They were more certain of the underlie of the great lode than of the north lode.

The agents' report was then passed.

The CHAIRMAN said there was one other matter on which they might expect some information, and that was on the subject of the lease. Since the last meeting the committee had had a long interview lasting two or three hours, with Mr. Goddard, and they did everything they possibly could to induce him to make some modification in the terms of the lease in favour of the shareholders. He was sorry to say, however, that Mr. Goddard adhered strictly and finally to the terms, &c., previously submitted, and the committee had no alternative but to accept those terms, and on Saturday last he wrote Mr. Goddard requesting him to send on the draft lease, which he was informed had already been prepared. He hoped they would think the committee had done their best, and he trusted that by the skilful and energetic management of Captain Bishop and the other agents, they would proceed to do even better in the future than in the immediate past. (Applause.)

In reply to a SHAREHOLDER, the CHAIRMAN stated that the lease was for 42 years, with the option to terminate the same at six months' notice.

The proceedings then ended.

KLERKSDORP ESTATES.

Reconstruction confirmed.—A promising concern.

An extraordinary general meeting of the Klerksdorp Estates (Limited) was held on Thursday, at the offices, 110, Cannon-street, under the presidency of Mr. D. MCDONALD (Chairman of the company).

The SECRETARY (Mr. A. J. May) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen, this meeting has been called in order to make the resolutions passed at the last meeting, special resolutions, in conformity with the Companies' Act. The previous meeting, held on the 12th inst., was largely attended, and the resolutions were unanimously approved and passed. In addition, the board was supported by a large number of proxies, and we feel confident that the shareholders at this meeting will approve of the scheme with the same unanimity as was given to it at the last meeting. I may mention that a large amount of support has been given also on this occasion by absent shareholders. In conformity with the directions given by the shareholders in the special resolutions, the liquidator has prepared the Memorandum and Articles of Association of the Klerksdorp Gold and Diamond Company. These have also been submitted to, and passed by, the committee of the Stock Exchange, and thus will prevent any delay in obtaining a special settlement. The forms of application for shares will be issued on Monday next, and, in response to the desire expressed in many influential quarters, the forms for taking up any shares which the present shareholders may neglect to take will be issued at the same time; so that the list will be promptly closed. In conclusion, I desire to express a hope that most, if not all, of the shareholders, and especially those who have been longest upon the register, will follow the example of the directors, and come to the new company; for I cannot help feeling there is before us a very prosperous future. Our debts will be all wiped off, our property freed from encumbrance, ample working capital provided, and, as you will remember I stated at the last meeting, the mine is fully equipped and ready to commence working. Your patience deserves to be rewarded, and I believe it will be in the not distant future. I conclude by moving the first resolution, which is as follows: "That it is desirable to reconstruct the company, and that, with a view thereto, the company be wound up voluntarily, under the provisions of the Companies' Acts, 1862 and 1890, and that Arthur John May, the secretary of the company, be, and he is hereby, appointed liquidator for the purposes of such winding up, at an agreed fee of 100 guineas."

Colonel STEUART seconded the resolution.

The CHAIRMAN enquired whether there were any shareholders who desired to make any observations before the passing of the resolution.

Mr. E. MORTLOCK: Mr. Chairman, I was not in England when the previous meeting was held; but since my return I have seen the report of it. I desire to give my most cordial support to the scheme of reconstruction, which seems to me to be both wise and statesmanlike, and for the benefit of everyone concerned. When far away from England reports reached me of the arrival of Klerksdorp diamonds in London, and I hope that before long parcels of these valuable commodities may be regularly sent home, and I trust that one of the first duties the new board will take in hand will be the working of the diamond grounds belonging to the company simultaneously with the recovery of the precious metal from the various reefs with which our property is intersected.

The resolution was put and carried unanimously.

The CHAIRMAN: I now beg to move the second resolution, which is in the following terms: "That the said liquidator be, and he is hereby authorised to consent to the registration of the new company to be named the Klerksdorp Gold and Diamond Company (Limited) or some other suitable title."

Colonel STEUART seconded the motion, which was immediately adopted.

The CHAIRMAN: The third resolution which I have to move is as follows: "That the draft agreement submitted to the meeting, and expressed to be made between this company, its liquidator, and the proposed new company (initialed by the Chairman), be, and the same is hereby approved, and that the said liquidator be, and he is hereby, authorised, pursuant to section 161 of the Companies' Act of 1862, to enter into an agreement with such new company (when incorporated) in accordance with such draft, or as near thereto as may be, and to carry the same into effect."

Colonel STEUART having seconded the resolution, it was agreed to *nem. con.*

The CHAIRMAN: The last resolution that I have to propose is, "That the said liquidator be, and he is hereby, expressly directed to make the payments expressed in the said draft agreement."

Colonel STEUART having seconded the resolution, it was put and adopted.

Mr. A. MARSHALL JAY: Sir, "The King is dead! Long live the King!" So says a proverb which seems peculiarly appropriate when the resolutions for reconstructing the company have just been confirmed, and the new company will, I understand, be registered in the course of to-day. The allotment of shares takes place almost immediately, and the new company will be started on what we all hope and believe will be a very prosperous career. I can hardly imagine that any member will be foolish enough to decline to take the new shares, and refuse the offer of 8s. worth of stock for 1s., but we have all heard of the man who declined to give 6d. for a sovereign, and it may, therefore, possibly be that some of our shareholders will act in a similar manner in the present case. If so, I presume we shall all have an opportunity of applying for any such surplus shares. We are told that we have a reef running through the property three or four miles in length, say, as far as from here to Hampstead Heath. As to the diamonds, I leave them out of consideration for the moment; but if the recent reported discoveries should prove correct, and these precious stones be found in large quantities, the value of the property might easily

amount to three or four times the nominal capital of the Company. Mr. Chairman and Colonel Stewart, we are under heavy obligation to you and the other members of the board for the manner in which you have stuck to this company through evil report and good report, and I wish to propose now, not an ordinary, but rather an extraordinary vote of thanks to you all for your past service, feeling assured that such a proposal will receive the unanimous support of the meeting. As we are hopeful that some of you will take a hand in the management of the of the new company, we bid you not adieu, but *au revoir*.

Mr. NUNN: I have very much pleasure in seconding the resolution.

The resolution was then put and carried.

The CHAIRMAN thanked the shareholders for the unanimous vote of confidence they had passed, and added that it would be the endeavour of his fellow directors and himself to forward the prosperity of the new company.

The meeting then concluded.

MATABELELAND ADVENTURERS, LIMITED.

The prospects of the company.—Promising situation in Matabeleland.

The adjourned first general meeting of the Matabeleland Adventurers (Limited) was held on Thursday, at the Guildhall Tavern, the chair being occupied by Mr. LOUIS CAMPBELL-JOHNSTON.

The SECRETARY (Mr. Brederick N. Newcome) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen, though not part of the business of this meeting, I think it would be most acceptable to all who are interested in our company if I tell you what we have done since our formation last June till the present time, and what our anticipations are for the near future. Immediately after our statutory meeting on June 29 our agents left England for Buluwayo to carry out the plans set forth in our prospectus—namely, the acquisition of mining and other properties in Matabeleland, on such favourable terms as are only obtainable by those who buy first hand and for cash on the spot, with a technical knowledge of the country. Our agents were particularly fortunate in securing, on their arrival in Cape Town, an interview with Mr. Rhodes and the other officials of the Chartered Company, the result of which was that Dr. Jameson, the Administrator-in-Chief, granted them special privileges to take up 200 claims wherever they liked in the territory. They lost no time, but proceeded at once to their destination, which they reached on August 8. After travelling round the country for about a month and examining all the new finds, we understand they have secured 100 claims in the Guande district, 40 in the Bambeu district, and 60 elsewhere. The Guande district which lies about 80 miles south of Buluwayo on the Tuli road, was discovered in August last, and is very highly spoken of in Africa at the present time. The future of Matabeleland as a mining and trading centre seems assured. Under the rigorous policy of Mr. Rhodes, the Matabele tribe, supposed to be equal to the Zulus in fighting power and numbers, has been entirely subdued, and seems now content to accept its new rulers in the British South Africa Company without more ado. The sale of town lots in Buluwayo has realised a total of over £42,000, which looks as if business men have confidence in its commercial future, while 16,000 mining claims have been registered, which shows the prospector is satisfied with its mineral wealth. Railways are being pushed in from both sides to develop its resources to the utmost. On the east we read from Reuter's cablegram (August 23) that the Beira-Buluwayo Railroad has been opened for traffic as far as the 75 mile post, and the trains are being run daily. Nearly 90 miles of rail are now laid, and the line will be open as far as Chimoise next month. In two months' time Buluwayo will be within nine days' journey of Beira. On the west side Mr. Rhodes has arranged for the extension of the Capetown-Mafeking Railroad to Gaberooms. Coal has been found to the west of Buluwayo, which is of the greatest importance to the development of a new country, and timber and good water are found in abundance everywhere. Miners, mechanics, and merchants are crowding into Matabeleland, from Europe, the Colonies, and America, and local capital is well represented, as proved by the opening of a branch of the Standard Bank of South Africa, to facilitate drafting money and all other forms of business. The pluck and vigour of the administration is shown by the fact that Buluwayo was in telegraphic communication with the rest of the world seven and a half months after its occupation. In a private letter from a gentleman in charge of an important commercial undertaking at Beira, the following occurs: "We are busy rushing up private goods. Beira is looking very lively, and all the houses are doing a good business. It will take at least 20 wagons per day throughout the dry season to take away the goods from the end of the line. There must be at least 500 tons waiting to be forwarded." To return from the bright auguries of the future of Matabeleland to the immediate welfare of our claims, you will be pleased to know that the British South African Company have received information by cable that Mr. Hammond, the company's consulting engineer, has reported favourably on several properties which he has specially examined in Matabeleland, and Mr. Hammond is of opinion the general reef formation is true fissure vein and will not pinch out. The assays, as published by the Chartered Company, from the different owners now developing their mines in the country, are more than gratifying, and with our own representatives on the spot, who have proved they lack neither energy or capacity, we shall indeed be unfortunate if we do not get some of the prizes from Tom Tiddler's ground. Then, after developing these properties, and still finding them valuable, beyond a doubt, we may honestly place them before the public, and reap that large profit which is due to our enterprise. The labourer is worthy of his hire, especially when he labours so far afield, and takes financial risks for his masters. We do not hold out the expectation of making large cash profits through the flotation of such companies, but we feel certain that the vendors' shares we get from them will be of great worth, and when divided amongst the shareholders of a company with such a small capital as ours, should make the shares of the Matabeleland adventurers of the greatest value. (Applause.)

The meeting then proceeded to the election of a director. Mr. William Graham and Mr. Kentish Rankin were nominated by the shareholders, and eventually, the matter being put to the vote, the former gentleman was elected.

A vote of thanks to the Chairman terminated the proceedings.

THE HARQUAHALA GOLD MINING COMPANY, LIMITED.

A distribution of 10 per cent.—Works vigorously proceeding.

The first annual general meeting of the Harquahala Gold Mining Company (Limited) was held yesterday at Winchester House, the chair being occupied by Mr. FRANCIS MUIR.

The SECRETARY (Mr. Charles Pakeman) read the notice convening the meeting.

The CHAIRMAN: Gentlemen, I presume it is your pleasure that the report and accounts be taken as read. And they set forth so fully, and in such detail, the history and working of the property during the past year that there does not appear to me to be very much that I can add by way of further explanation and remark. In the accounts I do not find any item that seems to merit special attention. Our net revenue for a little over eight months' milling, and nearly 12 months' mining and general work, amounted to £31,682 13s. 2d., out of which we have paid in dividends £29,000, or 10 per cent. on the capital of the company; we have set aside £1000 for machinery renewals, £905 19s. 8d. against capital expenditure, and we carry forward a balance of £776 13s. 6d. On capital account we have expended £7922 1s. 1d., and the balance of capital expended is £13,436 0s. 11d. The items of expenditure are fully set forth in the account. That for the new shaft was contemplated as probable from the first, but we were not aware until we had been working the property for some time how absolutely necessary it was. It is a matter for congratulation that the change from the old to the new shaft was made without accident or loss, but this would hardly have been possible had we not closed the old shaft as an ore way in December, as has been already fully explained. The largest item of capital expenditure—viz., that for the additional 10 stamps to the mill—was, as you are aware, recommended by the experts who reported on the property, and concurred in by Mr. Allen, both at the time I visited the mine in November and subsequently, the object being not to increase the value of the output, but to enable the lower grade ores to be worked profitably along with the higher grade. The higher items of expenditure were all absolutely necessary for the proper and most economical progress of the work, the protection and care of machinery and supplies, and the decent housing of the staff and employees. We have no further capital expenditure ahead of us that we know of, except the erection of plant for treatment of tailings, which will probably cost from £1000 to £1500. There have been treated in the mill during the year 23,619 tons of ore, of the average value of $15.13 per ton, of which we saved $12.23 per ton, of the bullion value of $291,336, and the average value of the tailings was $2.80 per ton. Mining, milling, miscellaneous expenses, amounted to $4.04 per ton—a reasonable figure, I think it will be admitted, considering the large amount of development work which has been accomplished. Mr. Allen's report gives full details of the work accomplished in all departments; and, considering the isolation of the spot, the transport difficulties, and the fierce heat of the summer months, I venture to think that the record is very creditable to Mr. Allen and his staff. Whatever has been possible to accomplish for the good of the property I am sure has been done, and if results so far have proved somewhat disappointing, it has not been from lack of anxiety or effort on their part. As to the present position and prospects of the mine in which we are all more or less deeply interested, there is again not much that I can say in addition to what you are already aware of. Mr. Allen, in his monthly reports, as well as in his annual report, has faithfully recorded the work as it progressed, and, indeed, I have heard the complaint made that the record has been too faithful as it presented itself to his mind. Be that as it may, he has only carried out the instructions given him in this direction, and it is a matter of regret to him, as it certainly has been to the board, that he has not felt able to give a somewhat more optimistic tinge to his reports. Under the circumstances, the board deemed it advisable to request Mr. Wartenweiler, whose high reputation as a mining expert is known to many of you, to again examine the property and report upon it, which he very kindly and promptly agreed to do, and his report was sent to shareholders on July 11. In that report Mr. Wartenweiler combats the suggestions which had been made that the life of the ore bodies must necessarily end at the lower levels owing to the change of formation and the advent of porphyry, and the developments since, particularly at the seventh level, appear to prove the correctness of his proposition, in that veins have since been cut in the porphyry, and are being followed, although, so far, without the discovery of ore bodies that would pay to work. These explorations are still being actively pursued. These observations apply to the Bonanza or original group of workings. At the Golden Eagle group, on which not much work had been done previous to our acquiring control of the property, the developments, so far, have been of a satisfactory character. With a view to more economical working, a tunnel has been driven into the hill, about 100 feet below the outcrop, which at a distance of 266 feet cut the main vein some 17 feet below the lowest previous level. From that point drifts have been run on the vein, principally south, about 180 feet, all but the last 30 feet in pay ore, and at a point 70 feet from the tunnel sinking has been begun on the vein, the depth reached at last account (August 8) being about 60 feet, and the value $9 per ton. Before the tunnel reached the main vein of the system as known, two other veins were cut, one 2 feet wide, assaying $20 per ton, and the other 6 feet wide, assaying $6 per ton. According to latest accounts, exploration on the first-named strike on the north side of the tunnel appear to indicate that it is only a pocket of rich ore, while on the 6-feet vein no work has yet been undertaken. As has been already mentioned, these workings are about a mile distant from the mill, and the ore is at present being hauled by wagons at a cost of 74c. per ton. As to the question of the tailings and how best to treat them, the report gives full particulars. Since it was issued we have from Captain Plummer the result of the experiments, kindly conducted by him at De Lamar, with the Kendall process, which proves unsuited to our purpose, being too costly for the values to be dealt with. We have, therefore, given orders for the construction at Harquahala of a small cyanide experimental plant, to be followed, if successful, by a plant capable of treating, say, 100 tons per day. At the same time we shall be inquiring into a chlorination process without roasting, which, in Captain Plummer's opinion, we might find more suitable even than cyanide. We are hoping, whatever method of treatment we may ultimately adopt, that we shall secure a profit of not less than $1.50 per ton, or, say, with a 100 tons plant $150 per day, or $4500 per month, in round figures. This, I think, is a moderate estimate. It is a matter of regret to the board that, owing to continued ill-health, Mr. Allen has been compelled to tender his resignation as manager at the mines. The heat of the summer appears to have affected his constitution with unusual severity, and he feels that he is not physically capable of doing full justice to the position, and must seek change of climate and rest in order to recuperate. The board have been taking steps for the appointment of his successor, and I am glad to state that they have secured the services of Mr. Raymond, a relative of Professor Raymond, of New York, the celebrated mining expert. Mr. Raymond is a young man of great promise, and comes to us with the highest recommendations as a mining expert, and also as an able, energetic, and trustworthy mine manager, and we have every confidence that under his care the mine will have full justice done to it. Mr. Raymond will assume charge about the middle of next month. That, gentlemen, I think, concludes all that it occurs to me to say, but I shall be happy to answer any questions that may be put to me (with reference to the accounts or the working of the mine), to the best of my ability. I beg to move "That the directors' report and audited statement of accounts for the period ending June 30, 1894, be and the same are hereby received and adopted." (Cheers.)

Mr. J. W. HART seconded the resolution, which was carried unanimously.

On the motion of Mr. WITCLIFFE, seconded by Mr. MAJOR, the auditors, Messrs. Ball, Baker, Deed, Cornish, and Co. were reappointed.

The proceedings then terminated.

THE gold taken from the Cape by the Union line steamship *Mexican* on Wednesday amounted in value to £112,000

THE EDITOR'S LETTER BOX.

*** We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.*

MODERN CONCENTRATING MILLS.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—Having read your interesting leader in the Journal of August 11 on "Modern Concentrating Mills," and Mr. Argall's letter in your last issue commenting upon it, may I be permitted to point out that what may, perhaps, be justly condemned in a certain case, may often be unjustly condemned under different circumstances. The point, I think, to be aimed at in designing any kind of mining plant is to adapt it to "local conditions," so that it will give the best possible commercial results in a given situation.

Cheapness of construction and economy of operation are certainly in this connection matters of prime importance; but in laying out concentrating plant, saving of mineral has also to be studied; and as it is seldom the case that equal perfection can be secured in every respect, the question generally to be decided is, How much can be best sacrificed in one direction to sink the requirements demanded in another way? The contour of the ground, and the position of the site with reference to the mine, water supply, and dumping ground, all influence the choice of situation for a mill; but before you can decide the matter, it is necessary to know what class of mill it is necessary to build.

The advantages (a and b) which Mr. Argall claims for flat mill sites can be equally well, if not better, secured in graded mill sites, if there is not room enough for the machinery under one roof by allotting a separate building to each department, and setting those in terraces one below another. To do a given amount of work you must employ a certain number of machines, which will demand an equal amount of floor room, whether your mill is flat or terraced.

In advocating flat mill sites, Mr. Argall says (c): "In short, the building is erected to cover the properly arranged machinery, and is not adapted to the exigencies of a given hill side, but given a carefully prepared design by 'contouring' the ground beforehand, I contend that it is generally possible to adapt a given hill side to the exigencies of properly arranged machinery." In American practice Mr. Argall is no doubt correct in saying that the terraced form of mill site is unnecessary, but in the continental type of concentrating mill, I think it is of the highest importance generally that the slope of the ground should be taken advantage of for the automatic conveyance of the mineral downward, not perhaps directly from one machine to another, but from one set of operations to another. There is a broad distinction to be drawn between the two things, since as Mr. Argall argues, and it is a very important point for close work, one of the chief advantages of the flat mill site is, that "by the use of elevators, each machine can be made at will superior or inferior to any other machine, to the extent of taking ore from or delivering ore to any other machine—a result that can rarely if ever (he says) be obtained in a mill built in terraces." This latter opinion may be either correct or false. It is correct if the ore is delivered directly from one machine to another; it is false if it is delivered from one set of operations to another; as it is perfectly possible to store it in bins, cars, or other receptacles, and redistribute it in any given quantity to any particular machine, or group of machines, by gravity, hydraulic, or mechanical means. Because a flat site is suited to American practice, it does not necessarily follow that a copy of it would be equally well adapted to conditions which have to be taken into account over here.

When labour is cheap, the life of the mine assured for a long period, and the ore is of considerable value, Continental practice demands careful classification, gradual reduction, and close concentration, and a graded site is, I consider, under such circumstances, usually speaking, advantageous; but when labour is dear, the life of a mine uncertain, and the chief object is to secure the largest possible profit in the shortest possible time, at a minimum capital outlay, irrespective of a certain unavoidable loss in unrecovered mineral, saving of mineral may be sacrificed to saving of cost and time by crushing the ore in quantity at once to a somewhat less average degree of fineness, and without such careful regard to sizing it.

This is the idea followed out in the Bonne Terre mill, which Mr. Argall takes as a type to prove the superiority of flat site over terraced mills. The adoption of a particular system is also largely influenced, or ought to be so, by three other most important considerations—viz., whether the ore is of a simple or complex character, and whether you have to deal with a large but low grade mineral deposit, or a small but comparatively rich one, for whilst in the former case output is a much more important object than close saving, in the latter it is just the reverse, and output should be subordinate to close saving.

In Part I. of the series of papers I recently read before the North of England Institute on the Choice of Course and Fine Crushing Machinery and Processes of Ore Treatment, p. 24*, curiously enough I cited the Bonne Terre mill as a typical example of American practice, and to show the difference between it and the Continental system I compared its record with the performance of a mill in the Pyrenees designed to treat an ore containing galena, blende, magnetic iron, and a small amount of copper pyrites.

Speaking of this plant, I said:—"On an output of 21,449 tons of crude ore in 1891 (averaging 9·33 per cent. of silver-lead and 11 per cent. of zinc) the cost of dressing, covering wages, supplies (including coal for three months of the year, water power being used for the remainder), renewals of machinery, &c., may be taken at about 3s. 10d. per crude ton." Whilst with regard to the Bonne Terre mill, I said, "The ore is non-argentiferous galena, associated with some iron pyrites carrying traces of nickel and cobalt. On an output of 224,203 tons of crude ore in 1886-87, averaging 5·65 per cent. of galena, the cost of dressing for the fiscal year ending May 1, covering labour, supplies, repairs, and coal was (1s. 6¼d.) 36·4 cents."

Commenting on these results, I remarked:—"It would appear at first sight that all the advantage lay with the American mill, and, no doubt, it does in America, where labour is dear, with the base ores that have to be dealt with in quantity where these works are situated. The case, however, would be entirely different if the American mill were transplanted to the Pyrenees, and set to work the silver ores of that locality, as the loss in the tailings at Bonne Terre is about 2·15 per cent., or 27·4 per cent. of the total amount of lead in the ore. These large losses are due to included mineral in the coarse sands, and very finely divided mineral in the very fine slimes, as a large part of the ore requires very fine crushing, owing to the exceedingly minute state of division of a large part of the mineral. In the Pyrenees such losses with argentiferous galena could not be afforded."

It may be said with certainty that the saving of mineral could

* Extract from the "Transactions of the Federated Institute of Mining Engineers."

be made to compare favourably with any similar works on the Continent, if this plant was laid out on the German system, and if they were terraced so as to secure a thorough automatic sequence of operations, the cost, instead of being 3s. 10d., would be reduced below 1s. 6d., treating a far smaller quantity than is handled in the Bonne Terre mill.

If an attempt were made, however, to treat a complex ore, like you have in the Pyrenees, in a flat site mill, the expense and difficulty of elevating and distributing the various products to the proper groups of machines would be greatly increased, and would, most probably, result in both loss and confusion.

Whilst I am perfectly in agreement with Mr. Argall, that elevators (using the expression in the sense he uses it) cannot be altogether dispensed with, whatever may be the type of mill employed, a terraced site reduces the number of such appliances to a minimum, and it is idle to argue that water and gravity are not cheaper conveyors than machinery and manual labour. If proof, however, is wanted, I may cite the record of the New Central Dressing Works at Frieberg, in Saxony. These dressing floors are designed to handle 150 tons of ore per shift of ten hours. The ore, which averages 0·15 to 0·20 per cent. silver, consists principally of argentiferous galena and iron pyrites, with zinc blende, copper, and arsenical pyrites as associated minerals.

The building in which this ore is treated is arranged in storeys one above the other, and contains rock-breakers, screens, picking tables, several sets of rolls, wet gravitation stamps, revolving screens, jigs, hydraulic classifiers, Stein's vanners, and other machinery, and the cost of dressing amounts to 10d. per ton, whilst the loss in the tailings amounts to only 0·01 per cent. silver, nil per cent. lead, 10 per cent. sulphur, and 9 per cent. zinc, the settlings in the final catch pits carrying only 0·01 per cent. silver, 2 per cent. lead, 8 per cent. sulphur, and 6 per cent. zinc, according to a statement of Oberbergrath O Bilharz.

It is pretty certain that if this ore had been treated in a flat site mill not only would the cost be very much greater than it is, but the losses as well would be largely increased, as a different system would have had to be adopted. Part of the ore at Frieberg is reduced with stamps to quite a fine state of division, about 2 millimetres as compared with an average of 6 millimetres at Bonne Terre.

As Mr. Argall says himself, "the cost of treatment is about inversely, as the mean diameter of the crushed ore," and considering that the gross tonnage handled is a still more important factor in influencing the expense, seeing that 800 tons ore crushed per diem at the Bonne Terre mill, compared with 150 tons in the German mill, it is, I think, reasonable to conclude that the saving of 8¼d. per ton in the Frieberg Works is to be attributed to its arrangement in storeys, which takes advantage of gravity.

In the flat site mills of Lake Superior, which represents some of the best dressing practice in America, the cost at the Atlantic Mine, despite its immense output, amounted to 1s. 1¾d. per ton of copper ore, whilst the losses in the district, according to Professor Munroe, averaged 28·5 to 31 per cent. in 1887. The advantages of a terraced mill will therefore, I think, often repay the extra capital outlay undoubtedly entailed in its construction, and the benefits of such a site are certainly fully recognised in American stamp mill construction. Why not then in a concentration plant?—I am, Sir, yours faithfully, A. G. CHARLETON.

Dashwood House, E.C., September 25, 1894.

TO THE EDITOR OF "THE MINING JOURNAL."

DEAR SIR,—Referring to Mr. Philip Argall's letter in your issue of September 22, may I be allowed to state, as engineer of one of the firms referred to in your articles on the above, that our own experience, and that of the late Mr. Lührig, in the design and erection of ore-dressing plants indicates that if the nature of the ground itself does not exclude all choice most of our clients prefer the design of a mill with the least number of bucket elevators, and on a site where the tailings from the mill can be disposed of in the easiest way, as is the case with mills built on a hillside.

Elevators are, of course, necessary in every mill, but it would appear from your correspondent's own data regarding the life of elevators of the belt and bucket type as generally used that there is ample justification for the desire of millmen to avoid too many elevators of that type, in view of the fact that any machine wearing out so quickly as stated is certain to give trouble sooner or later, when the wearing begins to show, as in many cases the replacing of wearing parts is only thought of when frequent stoppages occur.

There is no reason, as Mr. Argall rightly remarks, why bucket elevators should prove unsatisfactory if properly constructed and used intelligently, but these conditions seldom obtain. For our part we find no trouble in using elevators, with strong double steel links and rivetted steel sheet buckets of ample capacity and running slowly, instead of the ordinary type of belt or single chain elevator. Such elevators will last for years without requiring repairs or renewals.

It is difficult to discuss generally the comparative advantages of a flat mill site and one on the hillside; the various advantages of one or the other can only be compared in a specific case, as they greatly depend on the arrangement of buildings and machinery decided upon. There is no difficulty in arranging them, so that all the advantages a flat site might possess are embodied in the design for a mill on the hillside, and the cost of the building can with proper disposition of the machinery be even less than for the mill on the flat site, taking all the points into consideration.

The late Mr. Lührig and ourselves have designed and erected a considerable number of plants of large and small capacity on both plans, in cases where the conditions of the contract necessitated the thorough investigation of the economic advantages —both in cost of working (for which in most cases we gave guarantees) as well as in initial outlay—of each possible design, but we found no difference in favour of the flat mill site in general, as Mr. Argall would lead us to expect. But of course it all depends upon the design and the machinery used.

We give as examples of distinctive features of designs:—

1. The Himmelfahrt mill near Frieberg, a mill on a flat site with several storeys.

2. Mill of the Transvaal Silver Mines, Johannesburg, rolls, jigs, and slime dressing machinery on ground floor on quite a flat site.

3. Plant of the Société des Mines Argentifères de Pontpéan (France), capacity 500 tons in 10 hours, rolls on ground, jigs on first floor (except repeating jigs).

4. Mill of the Western Silver Mining Company, Tasmania, terrace form, rolls and jigs on upper, vanners on lower floor.

5. The new plant at Laurenberg on the Lahn, which might come nearest the ideal arrangement (allowing for certain deviations necessitated by existing arrangements and the nature of the ground), built on a hillside.

It would be idle to compare the cost of working of two plants treating different ores with one or two valuable minerals, in different quantities and of different efficiency, as too many conditions come into play to allow of reliable comparison.

We can, however, refer to the mill at Laurenburg, the last one built by Mr. Lührig himself, and which you referred to in your issue of August 25th. This plant on a hillside replaced one built on the flat site, and the cost of the new plant was not only below that of the old mill, but the cost also of working was reduced to half the former, besides a considerable increase in the yield and efficiency of the plant. The former plant was, of course, not built on the same principles, but, nevertheless, it was considered before the erection of the Lührig plant as best adapted to the circumstances of the case, and the very difficult nature of the ore.—Yours very truly, J. M. TIMM,

Engineer to the Lührig Coal and Ore Dressing Appliances (Limited).

32, *Victoria-street, S.W., September* 26, 1894.

TO THE EDITOR OF "THE MINING JOURNAL."

DEAR SIR,—Referring to your articles on "Ore Dressing," which have appeared in your Journal, I infer you ignore English makers altogether, which, to say the least of it, appears singular, speaking simply for myself.

The fact is, I have been advertising in the Journal for something like 20 years, machinery very much as you describe as the correct thing, and your remarks make it appear as though only such machinery was made in Germany and the United States of America.

Moreover, there was published in the Journal an engraving of similar plant made by me, the engraving being obtained by the officials of *The Mining Journal* from a photo taken by them. There was also published at the same time certificates of the efficiency of same, and I enclose herewith a reprint from *The Mining Journal* of August 15, 1891, giving a full description of my self-acting dressing machinery, and for which I obtained the gold medal, the highest award at the great International Mining Exhibition of 1890, held at the Crystal Palace, London, and which originated with the officials of *The Mining Journal*. I also enclose copy of testimonials I have received from my customers *re* my machinery. Does it not seem strange that you are so oblivious to the history of your own publication?

With regard to the controversy between yourself and Mr. Argall, as to how a dressing plant should be placed, whether on a slope, in the terrace form, or on level ground, I see nothing whatever to prevent a good mill being constructed either way, and the working cost should not very materially differ in either case.

I very much regret to have to mention the matter, but it does not seem to me as the right thing to do to the mining public, leaving them to suppose that efficient dressing plant can only be obtained abroad, when, as a matter of fact, there are several manufacturers in this country.

Kindly insert this letter in your next issue and oblige,—

Yours truly, GEORGE GREEN.

[As we have already noticed Mr. Green's machinery, as he admits, we think he has very little to complain of. We thought that by this time the impartial tone of *The Mining Journal* was known all the world over, even to advertisers themselves.—Ed. *M.J.*]

GEOLOGICAL COINCIDENCES IN VICTORIA.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—By the address of this letter you will observe I am at sea (on my way to Coolgardie and other gold fields in Western Australia). Before leaving Melbourne I read Mr. Dunn's letter, and note that he at last acknowledges that I preceded him in giving a geological and mining description of the Bendigo Gold Field, and its auriferous quartz reefs, and also that he followed on many of my lines some 10 years after my descriptions first appeared in your *Mining Journal*.

The pity of it is that Mr. Dunn did not see fit to do so much earlier. I cannot think that any good purpose can be served by a continuance of this correspondence, and so far as I am concerned, I trust this letter of mine may end this by no means instructive business, although your readers may have been amused at the different expressions of opinions made by your several correspondents.

Now that my articles on "The Golden Quartz Reefs of Australia" are re-published in pamphlet form, we (Mr. Dunn and myself) may safely leave the public to come to an independent and just decision on the whole affair.

With regard to my theory of the origin of quartz reefs and gold, which Mr. Dunn perhaps unnecessarily sneers at, I can only plead on its behalf that it is my own, and no one can regret more than I do that I had no better ideas to present to the public and Mr. Dunn for approval.—Yours, &c.,

WM. NICHOLAS.

S.s, Oroya, August 24, 1894.

A WARNING FROM COOLGARDIE.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—As I am aware that many attempts will be made by dishonest mining boomers to foist on the British capitalist some wild cat mines from this colony, I write this to caution the British people to be very careful what they will touch on the reports from men from this part. If capitalists wish to invest in West Australian mines there is plenty of time when the reefs are proved. As yet, this country has no trial beyond surface scratchings, which do not disclose much promise. The reefs are numerous, and some large bodies of stone are met with, but unfortunately ninety out of every hundred leases that are taken up are worthless. A few very rich dabs are found close to Coolgardie, but many of the outside camps, where rich reefs are said to exist, are worthless.—Yours, &c., JOHN SMITH.

Coolgardie, August 19, 1894.

BAYLEY'S WEST GOLD MINING COMPANY.

The capital of this company is also a small one, viz., £50,000, in 50,000 shares of £1 each, of which 35,000 are now offered for subscription. "This company has been formed," says the prospectus, "for the purpose of acquiring and further developing the mining lease of claim 632 (formerly 386) immediately upon the property of the Bayley's Reward Gold Mining Company (Limited), Coolgardie, and favourably reported upon by Captain W. J. Begelhole, the late manager, as well as by Mr. W. H. Matthews, the present general manager of that company. The area of the claim amounts to about 12 acres, and Captain Begelhole, than whom there is no greater authority, distinctly states that the Bayley's Reef runs through the centre of this company's property. Since the date of Mr. Matthews' first report, that gentleman stated (on the 23rd July) that a shaft had been sunk in the south western portion of the property, 'exposing a lode 5 feet thick, with 18 inches of solid stone, carrying gold.' He further states that the lode underlays east, and that it is making rapidly more into the property as depth is attained.' Still later information is to hand to the effect that the shaft is down 46 feet on reef, and that sinking is now going on on the underlay, also that two more shafts, each 20 feet deep, not mentioned in the report, have been sunk, and that in each shaft the reef has been cut. Up to the present the property has only been prospected in an inexpensive manner, but it is proposed to at once energetically develop its resources, which are believed to be second to none in the Coolgardie district."

THE directors of the Halkyn Mining Company (Limited) have declared a second interim dividend for the current year of 2s per share.

THE CYANIDE PROCESS OF GOLD AND SILVER EXTRACTION.*

By PHILIP ARGALL, M.R.I.A.

GOLD was in all probability one of the first metals to attract the attention of primitive man. Its beautiful and permanent luster, its high specific gravity, and its comparative scarceness withal, must have early rendered it an article of *vertu*, the search for which meant labour, and its possession wealth. The vessels of gold found in the Egyptian tombs, together with the drawings on their walls, give evidence of the advanced state of the metallurgy of gold long before the time of Rameses II. The Hebrew scriptures abound with references to the metallurgy of gold and silver, and particularly to the refining or cupellation process, evidently referred to by Jeremiah in; "The bellows are burned, the lead is consumed of the fire, the founder melteth in vain." The early Greeks were familiar with the natural alloy of silver and gold—electrum—rough-stamped nuggets of which formed the earliest coins of Lydia. Mercury, mentioned by the Greek philosopher, Theophrastus, as a derivative of cinnabar (300 B.C), was used by the Romans in the time of Pliny, both for the separation of the precious metals, and for the purpose of gilding.

Smelting then appears to be the older metallurgical process; next would come amalgamation, while hydro-metallurgical methods are apparently of very modern origin. I say apparently, for now that the Egyptian temples, tombs, and ruins, furnish evidence that diamond core drills, circular saws, hot-blast stoves, &c., were known and used 3000 to 4000 years ago, one cannot be certain that even the cyanide process itself is not a re-invention, at least until the Egyptologists are heard from.

In these degenerate days gold is recovered from its ores by amalgamation, by smelting, or by hydro-metallurgical methods. The first-named process is seldom entirely satisfactory, as the extraction is invariably more or less imperfect. It is, therefore, usual to precede or follow amalgamation with a process of concentration, to remove the heavier minerals that do not readily yield their gold to mercury. The concentrates so obtained are treated by the smelting process, or by hydro-metallurgical methods.

Smelting gives the highest practicable extraction of gold and silver from their ores, but usually at the greatest cost, while amalgamation—taken by itself—is the antithesis of smelting, as it may be said to give the lowest extraction at the least cost; nevertheless, on low-grade silicious ores, it is the more profitable of the two methods, and the one in general use.

The hydro-metallurgical treatment of gold ores has been steadily gaining ground for several years past, not alone in the treatment of concentrates and tailings, but also in the direct treatment of auriferous ores. Where the gold, by reason of its extreme fineness or the allotropic modifications of its molecules, or for other causes, will not amalgamate, and where the economic conditions that obtain do not permit smelting, recourse has usually been had to hydro-metallurgical methods, noted examples being the Mount Morgan Mine in Queensland, where amalgamation gave such poor results that it had to be abandoned in favour of chlorination, and the Mercur Mine, in Utah, where amalgamation is said to have extracted but 25 per cent. of the gold in the ore, at an expense of $4·25 per ton, while the cyanide process that replaced it is reported to give 80 to 85 per cent. of the gold, at a cost of $2·40.

Chlorination has held hitherto the first position among hydro-metallurgical methods of gold extraction, but it must now take a second place in favour of its powerful rival, the cyanide process, if measured by their relative gold production. The cyanide process, while suitable to perhaps the majority of gold ores, is not applicable to all. On certain classes of ore, and under certain well-known conditions, chlorination will give better results than will cyanide, and again the converse is true. Each process, then, has its field, at present perhaps but ill-defined, but which will shortly be marked with precision.

It is generally supposed that certain classes of sulphide and telluride ores which do not yield their gold to cyanide solutions within reasonable time, or with a reasonable expenditure of chemicals, should be treated by the chlorination process; it being argued that once it becomes necessary to roast the ore, chlorination is cheaper than cyaniding. This supposition is not strictly correct. Careful experiments have shown that such ores are often amenable to cyanide treatment after an extremely light roast, and that with proper expedients the consumption of cyanide in leaching the roasted ore is not abnormal. To chlorinate these ores a dead roast is a prime requisite, while the expense of the subsequent chlorination treatment will, in most cases exceed the cost of cyaniding. Another important feature; the chlorine will extract gold only, while cyanide invariably extracts a large proportion of the silver in the ore in addition to the gold.

The cyanide process is based on the solubility of gold and silver in solutions of potassium cyanide (KCN); this salt is composed—as shown by the formula—of potassium, carbon, and nitrogen, though the symbol Cy is commonly used, instead of the formula CN, to represent the radical cyanogen, which combines like chlorine with hydrogen and the metals. Roscoe compares its compounds with those of chlorine thus:—

Hydrocyanic acid, CyH.	Hydrochloric acid, ClH.
Potassium cyanide, CyK.	Potassium chloride, ClK.
Potassium cyanate, CyOK.	Potassium hypochlorite, ClOK.
Free cyanogen, Cy_2.	Free chlorin, Cl_2.

Hydrocyanic acid is so weak an acid that its soluble salts are readily decomposed by the carbonic acid of the air. Potassium cyanide is no exception to this rule, as its solutions decompose in contact with the air, and smell of hydrocyanic acid. Any weak acid or acid salts will also decompose cyanide solutions, and to this fact many of the chemical difficulties in the application of the cyanide process are due. If the ore is acid, it causes an increased consumption of potassium cyanide, and as this salt costs 50 cents per lb., any abnormal consumption cuts rapidly into the margin of profits.

It has long been known that gold is soluble in cyanide solutions. Hagen, for example, pointed out in 1805 that gold is dissolved not only by free chlorine and *aqua regia*, but also by a potassium cyanide solution. Glassford, Napier, Gemelin, and others mentioned the solvent power of cyanide on gold and silver, in the early part of this century. The classic experiments of Faraday on the relation of finely divided gold to light are well known. Suffice it to say that films of gold-leaf of extreme tenuity were obtained by spreading the leaf gold on glass plates, and subjecting them to cyanide solutions. Roseleur also pointed out that solutions of cyanides "rapidly dissolve in the cold, or at moderate temperature, all the metals except platinum."

Although the solubility of gold in cyanide solutions is no recent discovery, and although several attempts appear to have been made to introduce a process having potassium cyanide—usually in combination with another salt—as a solvent for the gold, it remained for Messrs. McArthur and Forrest to introduce a commercially useful process for treating ores with cyanide solutions. This process has been extremely successful in South Africa; fairly successful in some other countries, and until recently has been, on the whole, rather unsuccessful in the United States.

* Contributed to the September number of the *Engineering Magazine*.

(To be continued.)

TROOPS FOR SOUTH AFRICA.—The Union Steamship Company's Royal Mail Steamer *Arab*, sailing from Southampton on October 20, has been accepted by the Transport Department of the Admiralty for the conveyance of some 200 officers and men of the Royal Artillery and West Riding Regiment for conveyance to Cape Town and Durban.

LATEST FROM THE MINES.

CABLEGRAMS AND TELEGRAMS.

ALADDIN'S LAMP.—The following cablegram has been received from the mine:—"During last four weeks we have crushed 315 tons of ore, yielding 615 ounces of gold. The 500 feet level is looking first-rate, and we have completed a connection on this level with the Phœnix (Wentworth) shaft."

BAYLEY'S REWARD.—Mr. Samuel James, of 3, Copthall Chambers, E.C., has received the following cablegram, dated Coolgardie, 21st inst.:—"Bayley's Reward: In reply to your cable, water supply diminishing. Grade of ore is not so good." This was in answer to a cable sent by Mr. James inquiring why Bayley's Reward shares were being pressed for sale.—A cablegram, dated 25th inst., has also been received from Melbourne, stating:—"700 ounces, 80 tons."

BRILLIANT.—Result of crushing, as cabled from Charters Towers:—"4313 tons, 4450 ounces; dividend (the 52nd), 3d. per share."

DARIEN.—Copy of cablegram received from the manager, September 8:—"Purchase pipes and rail; the mine continues to improve."

DAY DAWN P. C.—The following cablegram has been received from the manager at Charters Towers, giving the result of the crushing for the fortnight ended September 22:—"No. 1 shaft, 48 tons, 27 ounces; No. 3 shaft, 142 tons, 246 ounces; tailings, 12 ounces. Have shipped, per s.s. *Jelunga*, 755 ounces."

ELKHORN.—Bullion produced in the mill for the week ended September 22, 7200 ounces; shut down for repairs one day.

FRANK JOHNSON AND CO.—The following cablegram has been received from South Africa:—"Mill working splendidly. Auriga clean-up yielded 14 dwts. per ton."

GOLDEN FEATHER CHANNEL.—The following has been received by cable from Colonel Frank McLaughlin, the company's general manager at Oroville:—"I have not telegraphed you before in reply to your cable of inquiry, wishing to give you the latest news. Will be sluicing debris (250 feet above new footdam) on Monday, September 24. Will be in pay two weeks thereafter. The indications are very favourable. It is believed to be the best part of the claim, and we are now in very much better condition for permanent working than ever before."

GOLDEN GATE.—The manager cables from Charters Towers:—"The present depth of the Diamond Drill bore from the surface is 1400 feet. The indications are favourable for cutting a vein."

GREAT COOLGARDIE.—The following cablegram has been received from the mine:—"Reef over 20 feet, carrying fine gold."

HARRIETVILLE.—Result obtained during the past four weeks, 500 tons, 159 ounces.

ISLE OF MAN.—The secretary sold on the 22nd inst. 100 tons of this company's ore at £7 19s. 6d. per ton.

LANDAK DIAMOND FIELDS.—A cablegram has been received from the engineer, reporting that indications show gold exists in abundance on the property, and that good progress is being made with the Diamond shaft.

LAS CABESSES MANGANESE.—Production for the week ending September 22 (6 working days) 734 tons, or a daily average of 122 tons.

MOUNT MORGAN.—The directors have received the following telegram from the head office, Rockhampton:—"We pay £25,000 on October 1, being dividend of 6d. per share (free of dividend tax) for the month of September."

OTTO'S KOPJE.—Mr. Lisle, the general manager, cables from Kimberley that he hopes the new machinery will be at work by the end of October.

PAHANG CORPORATION.—The output of black tin, inclusive of alluvial tin, for the months of June and July, weighing net piculs 1,378.28 (say 82 tons), has been sold in Singapore, realising $31,114.

PHŒNIX GOLDEN PILE.—Mr. Samuel James, of 3, Copthall Chambers, has received the following cablegram, dated Gympie, 20th inst.:—"Phœnix Golden Pile: Crushed 280 tons, yielding 611 ounces of gold. Dividend declared, 6d. per share."

TRANSVAAL COAL TRUST.—The following is copy of cablegram received from the Transvaal Coal Trust Company (Limited), at Johannesburg:—"Declared dividend of 1s. per share, payable to shareholders registered 15th October. Transfer books will be closed from the 16th to the 22nd of October inclusive." The payment of this dividend to the European shareholders may be expected about the end of December.

UNITED MEXICAN.—The directors have received the following telegram:—"San Cayetano: Gross returns for week ended September 15, $940; expenses, $1240; loss, $300.—El Cubo: Gross returns for week ended September 15, $6064; expenses, $6000; profit, $64."

VICTORIA GOLD MINING ASSOCIATION.—The fortnightly crushing has been cabled as follows:—"425 tons crushed, yielded 559 ounces gold."

WASSAU (Gold Coast).—The produce of the mine for the month of July last realised £1352 0s. 10d., being 331 ounces standard. The mill worked 19 days 10 hours, and crushed 285 tons of ore, giving a yield of 1 ounce 3½ dwts. standard per ton. Cablegrams have since been received advising the remmittance for last month as 228 ounces bullion, and a yield of 18 dwts. per ton. The directors attribute the falling off of the returns for August to want of native labour, which they have every reason to believe is only temporary.

WAIHI.—Bullion return for 28 days ending 22nd inst., £7700 from 2050 tons.

THE affairs of West Seton have not yet been settled, although the mine was wound up several years ago, and at the last meeting a distinct resolution was passed fixing the date of the next meeting: At New Great Work the situation is apparently somewhat similar to that at Atlas.

THE Minas de Tajo mines, located about 80 miles from Mazatlan, a Pacific seaport town of Mexico, have been worked continuously since 1536. They now have 40 miles of tunnels, and are working 900 men.

A DISCOVERY of enormous deposits of nitrates at Magdalena, Colombia, is reported. The deposits are estimated at over 7,000,000 tons. They are of excellent quality, and associated with iron pyrites. The situation is admirably adapted for working in competition with the Chilian trade.

THE PRINCE OF WALES MINE (LIMITED)—(In Voluntary Liquidation).—The liquidator, Mr. Edward Ashmead, held a meeting on Thursday at 2, Drapers'-gardens, for the purpose of hearing any objections to his calling up the 1s. 3d. of uncalled capital. Several of the large shareholders were present or represented. After hearing objections the liquidator made a call of 9d. per share on the shares settled by him on the list of contributories, payable on November 1 next.

The LIST will OPEN on MONDAY, October 1st, and CLOSE on TUESDAY October 2nd, at 4 o'clock.

Country applications will be received in London up to NOON on WEDNESDAY.

MURCHISON GOLD FIELDS, WESTERN AUSTRALIA.

THE AUSTIN GOLD MINES (LIMITED).

(Incorporated under the Companies' Acts, 1862 to 1893.)

CAPITAL £50,000

In 50,000 Shares of £1 each.

Of which the Vendors stipulate that 25,000 Shares credited as fully paid shall be allotted to them in part payment of the Purchase Money, and the remaining 25,000 are now offered for subscription.

Payable 2s. 6d. on Application, 5s. on Allotment, 5s. on 1st November, 5s. on the 1st December, and 2s. 6d. on the 1st January next.

DIRECTORS IN LONDON.

ROBERT SMITH, Esq., J.P., Brentham Park, Stirling, N.B. (Chairman), Director Cassel Gold Extracting Company (Limited).
F. I. RICARDE-SEAVER, Esq., F.R.S.Edin., F.G.S., Assoc.Inst.C.E., 16, Grafton Street, Bond Street, London, W., Director of Bechuanaland Exploration Company (Limited.)
F. O'S. B. READE, Esq., 83, Warwick Road, Earl's Court, London, S.W.
H. L. HUDSON, Esq., Chapel-Allerton, Leeds, and Melbourne, Victoria.

LOCAL BOARD IN AUSTRALIA.

(The following gentlemen will be appointed).

J. SINCLAIR PIRRIE, Esq., Manager of the Australasian Otis Engineering Company, Melbourne. } Directors of the Austin
F. K. TERRY, Esq., Merchant, Melbourne. } Gold Mining Company of Melbourne.
COLIN TEMPLETON, Esq., Mining Manager, Melbourne.

BANKERS.

London:—THE CLYDESDALE BANK (LIMITED), 30, Lombard Street, London, E.C.; Edinburgh, Glasgow, and other Branches in Scotland.
Western Australia:—UNION BANK OF AUSTRALIA (LIMITED), Head Office: Lothbury, London, E.C., and Cue, Western Australia.

SOLICITORS.

Messrs. DAVIDSON and MORRISS, 40—42, Queen Victoria Street, London, E.C.

BROKERS.

Messrs. CUTCLIFFE, LEY and McCULLOCH, 7, Adam's Court, Old Broad Street, London, E.C.
J. BARNETT GOW, Esq., 59, St. Vincent, Street, Glasgow.

AUDITORS.

Messrs. THOMSON, JACKSON, GOURLAY and TAYLOR, C.A., Glasgow and London.

SECRETARY AND OFFICES.

L. J. LANGMEAD, 23, COLLEGE HILL, CANNON STREET, E.C.

ABRIDGED PROSPECTUS.

This Company has been incorporated to acquire certain valuable Gold Mining Properties in Western Australia, known as the "GOLDEN GATE" 6 acres, "MONS MEG" 6 acres (both held under lease), and "AUSTIN," about 24 acres (which includes the North Golconda), for which application for a new lease has been made to and accepted by the Government, the whole comprising a total area of about 36 acres.

These properties are situate in the Murchison Gold Fields, Western Australia, on the Island, Lake Austin, about 100 yards from the Golconda Mine, on the same line of Reefs, and about 18 miles from Cue.

Reports upon the property to be acquired by the Company have been obtained by the AUSTIN GOLD MINING COMPANY, of Melbourne (the present owners), from Mr. GREGORY (Mining Engineer), and Mr. W. GIBSON, who has had extensive mining experience in Australia.

Extract from the Report of R. Gregory, Mining Engineer, dated Melbourne, 18th June, 1894:—

Mons Meg:—Not much work has been done on this claim since the Company took it over. The Chicago Reef undoubtedly runs through the claim. Good gold has been taken from the shaft.

Golden Gate:—The crushing plant has been erected on this Mine, and on it most of the work has been done. The reef on this claim is undoubtedly the Chicago. It has been proved through the whole block at a depth of 30 feet by sinking the six shafts and connecting them with a drive on the course of the reef and formation. The reef is clear and well defined, averaging over 4 feet thick, and in addition there is 8 feet of formation which carries good gold all through it, averaging, I should say, from 2 to 3 ounces per ton. The reef should average from 4 to 5 ounces, judging by what can be seen in the stone unbroken and from that which has been broken out ready for crushing.

Austin:—This is the largest, and I think will be found to be the most valuable of the Company's claims, including, as I do, the additional area lately pegged out by Mr. Aldridge, which brings the boundary of the claim up to that of the Evening Star.

By securing this additional area the Company's South Boundary is only 100 yards from that of the Golconda Mine. This reef, known as the Golconda Reef, runs right through the Austin Claim, which has been proved by shafts sunk on it at various depths, and lately by the new shaft sunk on the boundary of the Evening Star Claim, where it was struck at a depth of about 80 feet, but I have not got the exact depth as my time was fully taken up with the erection and working of the machinery. The same lode has been struck in two shafts on the Evening Star Claim on the same line and very rich gold has been dollied from it. We crushed 26 tons from the same line of reef taken from the Eureka Claim, south of the Golconda, which averages 5 ounces per ton. This reef does not out crop on the surface but is met with at from 3 to 6 feet below the surface, dipping west about 25 degrees, showing a clear well defined lode about 4 feet wide.

Water.—There is an ample supply of salt water for all purposes and now that the nature of the water is known there will be no difficulty in providing against its effects on iron. It has no bad effect upon the amalgamator, as far as I can judge and in this opinion Mr. ALDRIDGE agrees with me.

Extract from report of Mr. W. G. Gibson, dated 28th June, 1894; addressed to Mr. J. S. Pirrie, Chairman of the Austin Gold Mining Company of Melbourne:—

At the request of Mr J. M. Aldridge I have inspected the mining property called the Austin Mine, situated on the Island, Lake Austin, about 18 miles from Cue, on the Murchison Gold Field, West Australia.

The property now consists of a compact area, formerly in several blocks, but now amalgamated of 37 acres. There are at least two distinct lines of lode running through the length of the ground near y North and South. The lode on the East side of the property is a very large one, being 1? feet across, which strength it maintains through the entire distance on which it has been opened.

The lode material consists of veins of quartz, kaolin, reddish and yellow schist ironstone in various forms, and gypsum, the whole body being highly auriferous, as is shown by the results of the crushing of two parcels of ore, taken promiscuously from the heaps raised from the lode, one yielding 2¼ and the other 2¾ ounces per ton of ore.

The quantity of ore at grass and stacked in the drives is about 200 tons. I took quite at random from the heaps a number of samples. The results I annex to this report.

The results referred to.

No. 1 5 ounces per ton; No. 2 3 ounces; No. 3 2 ounces; No. 4 3 ounces; No. 5 nil; No. 6 3 ounces; No. 7 3 ounces.

Besides these, I washed on the spot a number of samples of the lode stuff taken from right across the reef, the results being exceedingly good; and in the case of the gypsum, in some trials showing something extraordinary in its yield of gold, where none was visible to the eye in the material operated on.

A Mine, such as the Austin, merits and requires much more powerful machinery. From the abundance of the Ore, it could keep up a supply of 300 or 400 tons a week, at a very moderate cost for raising on account of the size of the lode and softness of the material.

I would venture to suggest that the mine should be worked for such a depth as may be found convenient as an open cut, and when that is reached, then in the usual method. Mr. Aldridge estimates that he could find timber enough locally within a practicable distance to work the mine to a depth of 200 feet.

On the west side of the Austin property there is a reef running through it, entering from the south, called the Golconda reef, as it is a continuation from that celebrated mine. On this line of reef towards the north end of the "Austin," a shaft of 15 feet shows a very nice compact reef, 5 feet wide, running about north and south with a westerly dip at 70° from the horizon. In the face of the lode I had several drill holes put in. On washing the drillings, I found very good results in gold from all of them, especially the hanging wall and casing, which it seems to me may be an extension of the lode, which seems to be widening in that direction. I am informed by Mr. Aldridge that about 11?0 ounces of gold have been obtained by surface working and dollying from the Mine.

In short, after a most careful examination of the property, I have come to the conclusion that it will be found to be, from the great size of its lodes, and their persistent gold bearing quality throughout the body of the lode material, when well opened, amongst the foremost, if not the very best, property on the Island.

Mr. GIBSON further states:—

Any amount of ore could be raised at once, and it is a great waste of time not to put on a full crushing plant. I believe that the Austin property is the best on this field which I believe is a rich and permanent one.

The following is an extract from a letter of Mr. J. S. PIRRIE to a Shareholder of the Melbourne Company, one of the Vendors to this Company, dated 31st July, 1894:—

Mr. W. R. Fitzgerald Moore, who is acting in Western Australia for * * * informs me that he spent three days at the mine, and is prepared to purchase it for them, as he is of opinion that it is one of the best properties on the Murchison Gold Fields.

From Mr. Gibson's report it will be seen that if the (£7500) working capital required is quickly found, the mine can be made to pay within six months, which is the time that would be required to get the machinery on the ground and the new shafts sunk, so as to work the Golconda lode at the deeper level on the southern boundary, where it passes into our property from the "Evening Star" claim. This lode has been struck on the northern part of the Austin Lease (now amalgamated into "Golconda North") and proved to be gold bearing.

As I have already informed you, the two crushings already taken out average 2½ and 2¾ ounces per ton, from 15 tons, but from samples of the tailings brought from the mine, we find that from nearly 4 ounces per ton remains in them. These have been tested by Mr. A. G. Holroyd, whose report on same is enclosed. From this it will be seen that the ore will have to be treated in the same manner as in South Africa and New Zealand, viz., by crushing and copper plate amalgamation of the bulk, and treating the tailings by the cyanide process, or by pan amalgamation.

Extract from a letter from the Mine:—

Re Austin Mine. Recent developments in "Evening Star" workings at the 50 feet level are very encouraging for us on our new area. In driving east, about 1¼ chains (about 33 yards) from our South boundary, the "Evening Star" passed through three lode formations, two of them carrying rich stone, which they are now taking out for dollying; both shoots are striking out in our direction, and as soon as I get through Diorite Bar should cut through first reef—Golconda Reef—and will continue driving until I strike other lodes met with on "Evening Star."

These fresh reefs in the adjoining "Evening Star" claim are apparently only about 33 yards from the Austin boundary, and it will be noted that both shoots are striking towards this Company's property.

Later advices from Australia show that information has been received from the Mine Manager that he has secured a valuable "water right" of six acres, having a good spring of water suitable for feeding the boilers, and that a lease will also be granted for this in due course.

A small crushing plant has already been erected on the Golden Gate, but in view of the extent and value of the reefs already shown to exist, the further Working Capital now being raised is required to provide extra machinery to develop the mines upon a scale commensurate with their importance.

In view of the large area of ground that this Company will acquire, and the reefs already discovered, it is contemplated, at an early date, to form a subsidiary company or companies, for the purpose of working a portion of the property.

The Vendors to this Company have fixed the price to be paid for the properties, including plant already erected and on the ground, together with all stores and ore at grass at £41,000, payable as to £25,000 in fully-paid Shares, and as to the balance of £16,000 either in fully-paid Shares or partly in cash and partly in fully-paid Shares at the option of the Directors. The Vendors to this Company will also pay all expenses attending the promotion, formation; and incorporation of the Company up to allotment, and accordingly there will be left intact a sum of £9000 for working Capital and to meet any expenses incurred after the agreed date for taking over.

The following Contracts have been entered into:—

(1.) Agreement dated 24th September, 1894, between THE AUSTIN GOLD MINING COMPANY, of Melbourne, by ROBERT GAMBLES, their Attorney under power of the one part, and M. D. MCEACHARN and W. TRUBSHAWE of the other part, being a contract for the purchase of the properties.

(2.) Agreement dated 28th September, 1894, between the said M. D. MCEACHARN and W. TRUBSHAWE of the one part, and L. J. LANGMEAD as Trustee for the Company of the other part, being a contract for the re-sale of the properties at a profit.

Applications for Shares should be made on the accompanying form, and forwarded to the Company's Bankers, or to the Offices of the Company, together with the amount payable on application.

Full Prospectuses and Forms of Application may be obtained from the Bankers and Brokers, and at the Offices of the Company.

London, September 29th, 1894.

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his Company's Property immediately adjoins that of the celebrated Bayley's Reward Gold Mining Company (Limited), whose late Manager (Captain W. J. Begelhole), states that the Bayley Line of Reef runs through the centre of this Company's Block, as marked on the map accompanying the prospectus.

The SUBSCRIPTION LIST will OPEN on WEDNESDAY, the 3rd day of OCTOBER, and will close at 4 p.m. on the same day for Town, and at noon on the following day for the Country.

BAYLEY'S WEST GOLD MINING COMPANY, LIMITED.

Capital £50,000, in 50,000 Shares of £1 each, of which 35,000 SHARES are now OFFERED for PUBLIC SUBSCRIPTION. Payable 2s. 6d. on application, 7s. 6d. on allotment, and the balance in two calls of 5s. each at intervals of one and two months after allotment.

DIRECTORS.

David F. Carmichael, Es., Director West Australian Gold Concessions (Limited) and Madras Railway Company.
E. D. Oppert, Esq. (Messrs. E. D. Oppert and Co.), Director West Australian Gold Concessions (Limited).
J. Wiseman, Esq., Director Hampton Lands and Railway Syndicate (Limited) and West Australian Gold Concessions (Limited)
S. W. Paddon, Esq., 13, Cromwell Road, London, S.W.
Henry Times, Esq., 11, Portland Mansions, W.
R. H. Wesencraft, Esq., Baltic Chambers, Newcastle-on-Tyne, Director Blackett's Claim Gold Mining Company (Limited)
A. R. E. Burton, Esq., Perth, Western Australia, and 36, Great George Street, Westminster, S.W.

BANKERS.

London and South Western Bank (Limited), 168, Fenchurch Street, London, E.C., and Branches.
The Union Bank of Australia (Limited), Perth, and other Branches in Western Australia.

SOLICITORS.—Messrs. Ashurst, Morris, Crisp, and Co., 17, Throgmorton Avenue, E.C.

BROKERS.

Harry Sutherland, Esq., 2, Copthall Buildings, Throgmorton Street, E.C., and Stock Exchange, London, E.C.
Dugald S. MacPhee, Esq., 21, West Nile Street, Glasgow.

SECRETARY AND REGISTERED OFFICES—Mr. A. Aylard, 33, Old Broad Street, London, E.C.

This Company has been formed for the purpose of acquiring and further developing the Mining Lease of Claim 632 (formerly 386) immediately abutting upon the property of the Bayley's Reward Gold Mining Company (Limited), Coolgardie, and favourably reported upon by Captain W. J. Begelhole, the late manager, as well as by Mr. W. H. Matthews, the present general manager of that Company. The area of the claim amounts to about twelve acres, and Captain Begelhole, than whom there is no greater authority, distinctly states that the Bayley's Reef, as marked on accompanying map, runs through the centre of this Company's property.

Since the date of Mr. Matthews' first report, that gentleman stated (on the 23rd July) that a shaft had been sunk in the south western portion of the property "exposing a lode five feet thick, with eighteen inches of solid stone, carrying gold." He further states that "the lode underlays east, and that it is making steadily more into the property as depth is attained."

Still later information is to hand to the effect that the shaft is down forty-six feet on reef, and that sinking is now going on on the underlay, also that two more shafts, each twenty feet deep, not mentioned in the report, have been sunk, and that in each shaft the reef has been cut.

Up to the present the property has only been prospected in an inexpensive manner, but it is proposed to at once energetically develop its resources, which are believed to be second to none in the Coolgardie district.

This view is strongly supported by the following statements, taken from Captain Begelhole's report:—

"Careful surveys prove beyond a doubt that the Bayley line of reef, now so successfully worked in the Bayley's Reward Mine, runs through the centre of your block as marked on your map. I may state that whilst Manager of Bayley's I had the reef traced right up to your boundary. The reef underlays east.

"Already a large quantity of specimens of quartz gold has been taken from the shallow workings. Some of the specimens shown to me contain twenty ounces of gold; these had evidently been shed from your reef. Captain Begelhole has since added to his report that these specimens only weighed a few pounds.

"The reef has been exposed in surface cutting and small shafts at several points. In all these workings stone showing visible gold has been broken out, and every sample tested indicates a profitable return."

The Directors draw attention to the fact that the Bayley's Reward Gold Mining Company (Limited), whose reef Captain Begelhole considers beyond a doubt to run through this Company's property, have, within a period of a little over a year, paid dividends to the extent of between £90,000 and £100,000 the ore crushed lately (not counting that yielding the exceptionally rich results now so well known) averaging about ten ounces to the ton. Their ore has, so far, been drawn from only a fraction of their property, the crushing machinery having until lately consisted of but five stamps.

The directors consider that with its comparatively small capital of £50,000 this Company starts with prospects of success possessed by very few West Australian undertakings. The present value of the share capital of its neighbour the Bayley's Reward Gold Mining Company (originally £24,000) is about half-a-million sterling, equal to about 1000 per cent. premium on its original capital.

The vendors (The West Australian Gold Concessions, Limited) have fixed the purchase consideration at £40,000, payable as to £10,000 in cash and as to the balance in cash or shares, or partly in cash and partly in shares, at the option of the Company, the Vendor Company, however, stipulating for the right to require that at least £15,000 shall be allotted to it in shares instead of cash. The vendors will pay all charges incidental to the formation of the Company, except brokerages.

The following contracts have been entered into: dated 25th July, 1894, between A. G. Jenkins and Alfred Richard Edward Burton; two contracts between Alfred Richard Edward Burton and West Australian Gold Concessions (Limited)—one dated 20th June, 1894, and the other dated 12th September, 1894; dated 26th September, 1894, between West Australian Gold Concessions (Limited) and Bayley's West Gold Mining Company (Limited).

Copies of these contracts as well as of the reports, and of the Memorandum and Articles of Association may, while the lists are open, be inspected by intending applicants at the Offices of the Company's Solicitors.

The vendors have reserved the right to enter into, and have entered into, arrangements with third parties with reference to the expenses of and incidental to the formation and registration of the Company and the subscription of its capital, to none of which the company is a party. Such arrangements may, however, constitute contracts within the meaning of the 38th section of the Companies' Act, 1867. Applicants for shares must therefore be deemed to have notice of the said arrangements, and to have waived any further disclosure and any fuller compliance with the said section with reference thereto or otherwise, and allotment will only be made upon this express condition.

Applications for shares should be made on the form accompanying the prospectus. Prospectuses may be had of the Bankers, Brokers, and the Secretary of the Company.

33, Old Broad Street, London, E.C., 24th September, 1894.

C. PASS AND SON, BRISTOL,
ARE BUYERS OF
LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS, ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c. and DROSS or ORES containing
TIN, COPPER, LEAD, AND ANTIMONY.

HENRY WIGGIN & CO. (Limited),
NICKEL AND COBALT REFINERS,
MAKERS OF BEST RED LEAD FOR FLINT GLASS MANUFACTURERS,
BIRMINGHAM.

PACIFIC MINING AGENCY AND TRUST COMPANY.

A Corporation organised under the Laws of the State of California.
CAPITAL STOCK, £50,000.
BOARD.
IRWIN C. STUMP (Chairman), Manager of the Estate of the late U.S. Senator Hearst.
IRVING M. SCOTT, Manager Union Iron Works.
JACOB H. NEFF, President California Miners' Association.
P. N. LILIENTHAL, Manager Anglo-California Bank (Limited).
W. F. GOAD, Vice-President, Wells, Fargo, and Co.
D. M. BURNS, Capitalist.
R. C. CHAMBERS, Manager Ontario Mine, Utah.
WILLIAM C. RALSTON, Secretary (Secretary California Miners Association).
BANKERS—The ANGLO-CALIFORNIAN BANK (Limited).
HEAD OFFICE — MILLS BUILDING, SAN FRANCISCO, CAL.

THIS COMPANY sells Mines, Mining Claims, Ditch Properties, and Water Rights ON COMMISSION, and will act as Agent and Broker for the Sale and Purchase of such Properties.

It is intended to conduct the Purchase and Sale of Mining Claims, Ditch Properties, and Water Rights on the same basis as a real estate transaction.

The Company is prohibited by its Articles of Incorporation from buying or selling on its own behalf, or except upon commission, or as agent or factor for others.

The buyer pays no fees whatever, and there is no incentive to advance the price beyond the original figures at which the price and commission have been agreed upon with the seller.

It is not intended only to negotiate the sale of an entire property but interests in such may be sold or money obtained for development work.

This Company especially solicits the business of making reports or examinations for non-resident mine owners on any of their mines in the United States, and obtaining special information as to their condition and so forth (said reports being confidential).

Those who conduct the business of the Company have had long experience in mining operations, and it is their intention to place the Company in a position to inspire the confidence of all who seek its assistance in its integrity and fair dealing.

We respectfully refer to any Bank in the City of San Francisco and to the Anglo-Californian Bank (Limited), London, as to the standing of the Board of Directors of this Company.

Descriptions of properties for sale with maps, reports and all necessary information, are left on file in the office of the Company. Abstracts of such reports with prices of mines will be furnished pon application.

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LONDON: SEPTEMBER 29, 1894.

COMPANY DIRECTORS.

THE officials of a mine who are responsible, in the eyes of the law, for the conduct of its affairs are the directors; and although this body of gentlemen is often held up to derision in the public Press, there is much to be said in favour of the system which entrusts the supreme management of a company's affairs to a board of directors, presumably chosen by the body of the shareholders from amongst themselves, because of their special aptitude for, or knowledge of, the business in hand. Such is the ideal board; and if such a one could be elected, we believe that we should hear of fewer failures and less frequent cries of gross mismanagement and culpable negligence, and a consequent increase of confidence on the part of the public at large, especially in mining and its kindred industries, to the interests of which *The Mining Journal* is more particularly devoted. We have written frequently of late upon matters connected with the sale, purchase, examination, and management of mines; and in now calling attention to some of the errors connected with the choice of directors, and their mode of working, we do so, not because we are oblivious to the many good points of the system which do not call for criticism, but because we believe that if more careful attention were paid in the first instance to the constitution of the board, fewer errors would be committed in the management of the undertaking, and in consequence the prospects of success would be increased. As a rule, the formation of a company is commenced by the firm of solicitors to whom the vendors have been introduced. The lawyers generally have amongst their connections a few rich clients who will put up the money necessary for a preliminary investigation of the business; and before proceeding far will probably send out an expert in whom they have confidence to confirm or otherwise the reports submitted by the vendors. On this subject, and of the duties pertaining to, and the difficulties surrounding the career of, an expert, we wrote fully in our leader of September 8th; so that, for our present purpose, we will assume that the expert has returned, and that the result of his investigations is satisfactory. Putting aside, also, the question of capitalisation, upon which we may have something to say at a future date, the step now to be taken is that of choosing a board of directors for the embryo company.

It sometimes happens that the vendor insists upon the formation and registration of the company before a certain date, and in this case a dummy board, consisting of clerks, is formed upon the understanding that later on they are to give place to gentlemen probably more competent to manage the business in hand; but, at any rate, with names and positions in which the investing public will place more confidence. This device may occasionally serve to get over a difficulty, but we think it is one which should rarely be resorted to, though we fully appreciate the advantage gained by the vendors in thus securing the allotment of their shares; and this makes us still more insist that the vendors' shares should be locked up and kept off the market for some considerable time after the formation of the company. The solicitor in charge of the business generally has the power of selecting the directors, and this he naturally does from amongst those of his clients who are willing to subscribe the most towards the preliminary expenses, and qualify themselves for a seat on the board. These considerations have still more weight if the gentlemen in question have a title of some sort, whether civil or military, and can also induce friends of their own to take up shares. Probably the qualification least insisted upon, even if it is ever enquired after, is whether the applicant has any special business capacity or knowledge of the particular industry in question. And yet these are the very qualifications which, in mining especially, are of vital importance, for we might as justly expect a bootmaker, for instance, to run a chemist's business without disastrous results as a board consisting of retired military gentlemen, with a sprinking of lords to carry on successfully the intricate operations of mining and milling. If a company is burdened with such a board one or two things must happen; either the board will carry on the business until they are turned out by exasperated shareholders, or the work will be left entirely in the manager's hands. If this latter is a good and able man, things will probably run along smoothly as long as he is not interfered with, but, as we have pointed out in our leaders on the Causes of Failures in Mines it is almost more difficult to obtain good reliable manager than it is to procure good mines, so that while the managers should not be worried with too much interference in his work, it is decidedly to the advantage of the undertaking that the board of directors should, as their name implies, be able to direct.

We have not as yet referred to those amiable gentlemen who are commonly known as "guinea-pigs," and who are willing to lend their names to any company promoter so long as they can pocket their guinea fee for each attendance at the board meeting. Nor do we purpose giving them an extended notice, for although personally they may be attractive and courteous, yet from the practical miners' point of view, their utility is extremely limited. What is really desired is that the board of a mining company shall be composed of men who know their business, and will resolutely act in the interests of the body of shareholders whom they represent. It does not of necessity follow that the whole board should be composed of mining men, for there are financial, legal, and commercial questions involved as well as those of a technical mining character, but in our view it is essential to success that the board should be composed of intelligent and upright business men, and that some amongst them should have an intimate knowledge of the technicalities of the industry which they direct. The number of gentlemen of which the board should be composed is also an important item to be considered. A large board is apt to become unwieldy in the sense that al its members are less likely to agree to work harmoniously together, for without perfect concord amongst its members, the old proverb about a house divided against itself, will inevitably force itself to the front in an irresistible fashion. We do not remember to have mentioned this among the causes of failure in mines, but dissensions in the governing body cannot fail to have a prejudicial effect upon the success of the enterprise. The subordinate officials are sure to be infected thereby, and the discontent will finally spread to the employees generally, so that the wavering undecided policy of the board will make itself felt from the highest official down to the humblest workman. The moral is self evident. The government of a company like that of a country must be conducted with a firm hand, and until we obtain a larger proportion of boards of directors more or less approaching the ideal one which we have sketched out, we fear that the public money will continue to be wasted fruitlessly, and the mining industries to occupy a lower place in public opinion than the one which they deserve, and to which we desire that they should attain. At the present moment there is considerable excitement as to the development of mines in Western Australia, and doubtless we shall see several companies formed for this purpose. Now, therefore, is the time to insist that these undertakings shall be entrusted to the hands of men capable of directing, and who will not take up the position of director unless they have previously convinced themselves of the intrinsic merits of the mine with which they are connected. Unless this is done then after the excitement is over we shall hear of mines which never were worthy of the name, and have the market flooded with stock of which the holders will find it extremely difficult to dispose.

THE DAY OF SMALL THINGS.

THIS is the day of small things in gold mining. A quarter of a century ago anything less than an ounce to the ton was usually regarded as unprofitable, unless the surroundings of the property worked were exceptionally favourable to cheap production. It was then a question of "How many ounces to the ton?" Now we ask "How many pennyweights will it yield?" Of course, we are speaking of quartz mining, for in working huge alluvial deposits, "pennyweights" to the load open up vistas of wealth which only distant—very distant—and inaccessible fields venture to promise. In placer mining the calculation of cents is indulged in, and one mine in New Zealand pays on a yield of a grain of gold to the yard. The cost of treatment averages 1½d. per load, and the other ½d. furnishes a handsome dividend to those interested in the property. Labour-saving machinery, the utilisation of Nature's ample resources in the shape of water, the skill of the hydraulic engineer, the advance of science, and last, but not least, the application of careful business principles in the management of gold mines, have all tended to bring about these results.

Many years ago the late Sir WARINGTON SMYTH ventured to predict that if the quartz reefs of Wales would yield 8 ounces to the ton, they might with economical management be made to pay a substantial return on the money invested in their development, but Professor CROOKES is well content with as many pennyweights, though his recent average at Cefn Coch has exceeded ½ ounce to the ton. The Alaska Treadwell property mines, mills, and otherwise treat low grade ore at a cost of 6s. per ton, and another property, worked on a maller scale with Huntington Mills, finds a gold return of 2s 6d. per ton profitable, the whole cost of mining, treatment, and management being covered by 2s. 3½d. per ton. As we said at the commencement of our article, this is the day of small things, and as even with the greatly increased production there is still a dearth of gold, it would be well if the attention of miners and capitalists reverted to some of the fields long since discarded, but which, when worked under old conditions, failed to pay because they yielded only pennyweights and not ounces to the ton. The old-fashioned gold miner was a man in a hurry to be rich, and with little capital, and less skill, he was ever ready to discard one field, and betake himself to pastures new, in the hope that a few months labour would enable him to spend the remainder of his days in that luxurious ease which wealth is supposed to ensure. There is still a good deal of the old leaven left in the gold miner's composition, as is evidenced by the rush to Western Australia during the last two years. It must be acknowledged that the returns and reports from that country are almost fabulous, but for some time to come the yield per ton must be large in order that, with the difficulties attendant on working in the new fields, the production of gold may prove a profitable undertaking. There the day of pennyweights has not yet begun, though as the ore is easily treated, and, supposing that the gold is not confined to rich shoots which, with the present limited experience, seems to be the case, there is no reason to doubt that in the future the calculation of pennyweights may deserve attention in Western Australia.

The question we are desirous of asking is, Which is best for the world—the age of ounces, or the age of pennyweights? Gold, in our present commercial system, is a necessity, and the greater the production the sooner will the vexed problem of the currency standard be solved. But there are other aspects worthy of consideration besides currency. There is the industrial aspect. The treatment of low grade ores creates a demand for labour and extensive machinery and plant, and by this the question of the amount of unemployed labour in the world is affected in a dual sense. First, miners are required for the production of the ore, and secondly, the iron, steel and mechanical trades are requisitioned for the provision of material and machinery. The high grade gold field usually concentrates wealth in the hands of a few—the low grade field has the effect of distributing prosperity among the many. Low grade mining is essentially an industrial enterprise, and is far reaching in its effects upon other industrial undertakings. From a purely industrial point of view, therefore, the day of pennyweights is rather to be welcomed than despised, and the resumption of work on discarded low grade fields, which is now taking place in many of our colonial possessions, is a healthy sign in the industrial world.

TO OUR READERS.

OWING to the extreme pressure upon our space this week, the cause of which will be apparent, we are reluctantly compelled to hold over several reports from the mines, including The Chiapas Mining Company, The Elkhorn Mining Company, The Harquahala Mining Company, United Gold Fields of Manica, Mount Zeehan (Tasmania), The Anglo-Mexican Mining Company, The Darien Gold Mining Company, &c.

NOTES AND COMMENTS.

THE information we are receiving from Western Australia is more or less of an unofficial character, and coming, as it mostly does, from private individuals, it is more or less biassed, and in some cases exaggerated. It is true, we cannot reject as false the announcement received by cablegram of wonderful and increasing outputs, or of astounding discoveries, almost unrivalled in the era of gold mining. Such evidences we cannot dispute, for they bring along with them the proofs of their truthfulness. But it is when information is published by those who have a certain game to play that we must be a little wary and sceptical, and not be too ready to believe in their immodest and unvarnished narratives. The latter are, of course, more frequently embodied in the prospectuses of new companies, which, as a rule, are not the documents wherein disinterested statements are set forth. We would repeat our warning given some weeks ago — which, by-the-bye, is endorsed in a letter from a mining expert at Coolgardie, which we publish—not to be too impatient or too excited, but to take matters calmly, and be content to wait until mining in Western Australia has become a more settled industry, and until surer evidence is furnished us of the permanent richness of the field.

RECENTLY, however, some official information has been laid before the West Australian Parliament in the *ad interim* report of the Secretary for Mines. This report deals with the half year ending June, 1894, and is at once useful as conveying a good deal of valuable information, and satisfactory as showing the awakening interest not only of the population of the country, but also of the Government, in the mining of the colony. It appears that for the period covered by the report the gold exports reached the total of 75,817 ounces, valued in sterling at £288,109. In judging of the magnitude of this production, it should not be forgotten that the movement towards the colony, which has now attained so great a magnitude, had not commenced, or, at least, was but at its very beginning, when the report was written. The period dealt with by the next report will have felt the force, though not the full force, of the rapid concentration of attention in Western Australia, and upon that account should have an even more satisfactory result than the one already reported upon.

WHILE the necessity for caution cannot be too emphatically demonstrated, it should not lead to a short-sighted distrust of the whole set of mining ventures connected with the colony. There are upon record the opinions of many able engineers to the effect that the gold-producing capacity of the mines in the interior of the colony is on a vast and brilliant scale. Up to the present the attempts which have been made to profit by these immense sources of riches have necessarily been to an extent frustrated by the difficulties of transport and water supply to be encountered in the country. If Nature has been generous in her bounty of gold, she has also set upon it an unmistakably high price in the combatting of the obstacles of climate and country. Money, time, and perseverance will be required for the work, and too much reliance should not be placed on the expectation of immediate results. Directors of the companies now being formed for the exploitation of these colonial mines will have to "learn to labour and to wait."

THE mining engineers' report, for which the shareholders in the Eaglehawk Mine have been waiting for some time, is now to hand, and bears upon it the character of openness and candour. No exaggerated hopes are held out to the shareholders; there is simply a plain, barren statement of facts, such as for sober minds always carries a much greater weight. On the whole, the report is a favourable one. The sinking of the Limited shaft has been carried out rather more happily than was anticipated, while the construction of the water-dam is expected to lead to great economies of working. Much of the report is occupied by a bare forecast of what works will have in the future to be done, and it is only in conclusion that Mr. Nicholas allow himself to lapse into a general view of the prospects of the mine. His sentences are worth quotation, as they serve to put the position of the company in a nutshell:—"A most important stage has been reached in the progress of your mine. It is possible you may in a few months have proved the Eaglehawk Consolidated to be a very valuable mine, fully equipped with machinery, and dividends accumulating. But it is my duty to warn you of a probable pinching of the reef, where the 1000 feet crosscut will intersect the reef or its 'track,' and that is my reason for giving the south drive on the reef at this level precedence to the north." There could hardly be a more sober prognostication of probability than this.

THE undertaking known by the rather racy title of the Matabeleland Adventurers (Limited) is well under weigh, and may be expected shortly to be engaged in promoting at the same time its own interests and the development of the country involved in the late war. For the present, the public attention is being diverted from this particular district. With a war raging in the East, an Australian boom, and the intensification of the situation in Madagascar, the public may easily, for the time being, overlook Matabeleland; only for the time, however, for the reports to hand from thence mark the place as a mining district of great capabilities. The directors, elected by the Matabeleland adventurers, have lost no time in putting things into order, so that their shareholders may fully profit by the many advantages offered at present by the mining concerns in this newly-opened area. Agents have been sent into the country, prospecting has been carried out, and claims have been bought. The province of the company is rather that of promoting subsidiary companies than the direct conduct of mining operations. With a rapidly-developing country like Matabeleland, and a strong and able board, the adventurers would appear to be hopefully embarked.

The reconstruction scheme, passed at a former meeting, was unanimously confirmed by the shareholders of the Klerksdorp Estates at Thursday's meeting. As before, there was almost absolute unanimity at the meeting as to the merits of the proposal, and everybody seemed hopefully looking forward to the re-commencement of operations, and the arrival of the dividend stage. The Chairman pithily put into one sentence the position which will be occupied by the company after reconstruction. "Our debts will all be wiped off," he said, "our property freed from encumbrance, ample working capital provided, and the mine fully equipped and in working order." The probable discovery of diamonds on the property of the company is a considerable stroke of good fortune, and will, if it be confirmed, enable the company to carry out diamond working and gold reefing contemporaneously. All things considered, therefore, the regenerated company will start upon its career with good prospects, which appear fully to justify the step recently taken by the directors, as also the hopes expressed at both meetings.

A COLONY which, like South Australia, owes much of its position to the mineral workings within its borders, would appear to be under the first necessity to organise a thoroughly competent geological department in connection with its Government. From an article published by Dr. C. Chewings in one of the Australian papers, it appears that there is much to be wished for in the constitution of the South Australian Geological Survey. It is not from any want of ability on the part of Mr. Brown, the Government Geologist, that the work of the colony is not performed as admirably as should be the case. The responsibility for imperfection rests rather with the conditions of his appointment—his single-handedness, the multitude of semi-supervisors, mostly members of Parliament, who interfere with his work, and the absence of anything like a proper system in the disposal of his time and attention. His journeyings from place to place are made without any connection with each other. The programme is rather that of an excursion society than one framed with a deliberate and well-considered purpose. South Australia is not the only one of our colonies which has become alive to the strong necessity of effecting considerable improvements in their geological work. Now that the attention of the colonials has been drawn to the matter, reform can hardly be long delayed.

THE Duke of Devonshire laid on Saturday last the foundation stone of a new church at Stavely, in Derbyshire, and His Grace, in the course of the remarks which are the usual accompaniment of a ceremony of the kind, took occasion to refer to trade prospects in general, and those of the iron trade in particular. A comparison was suggested to his mind between the prosperity of the local iron and steel works and the very hard times which have come upon similar factories elsewhere. Not only is the present bad with them, but it is difficult to look forward with any confidence to an improvement. England no longer has the monopolies of coal and iron which formerly gave her so great an advantage among the nations of the world, while by an equal education and skill the operatives of other countries were able to compete advantageously against our own. Upon the education of the population the Duke laid especial stress as the direction in which the care and attention of those interested in manufactures could most usefully be turned. "For some years past," he said, "he had to the best of his ability been advocating, perhaps out of season as well as in season, the necessity in this country of following the example of foreign countries are endeavouring to educate those who were about, whether manually or mentally, to take part in the manufactories of this country to as high a degree of scientific and commercial perfection as was attainable." Here, at least, is sound wisdom.

A BOOM on a small scale is predicted for mining in Eidsvoid, Queensland. Latterly the interest taken there in the industry has shown a good many symptoms of subsiding, and the livening up of the place will come as a great satisfaction to the neighbourhood. The discovery of the Lady Minerva claim, closely followed by the striking of the reef at the No. 1 West Mount Rose, communicated no small enthusiasm among the local mining men, the neighbouring slopes having been all eagerly pegged off by enterprising workers. Results as the earnest of future gains are now eagerly looked for week by week. It is satisfactory to learn that the area already occupied by claim holders is not all, or nearly all, the available ground likely to be profitable. The district is said to be of a granite formation and an excellent reefing area. Sinking through the hard blue granite is expensive in time and money, but the lower levels are much the richer in gold. Operations upon a more resolute and adequate scale are now in course of procedure, and it is confidently expected that the new period will be much more prosperous for Eidsvoid than the old.

THE Kimberley Chamber of Commerce has latterly expressed considerable disapproval of the compound system enforced upon the blacks in the employment of the diamond companies, by which they are kept under close surveillance, searched before they leave the enclosure, and prevented from intoxicating themselves by the absorption of spirituous liquors. Like many another class of critics, the Chamber confine themselves to denunciation, and do not indicate how the present arrangement could be advantageously replaced by another. What other device could be resorted to by which the sobriety and honesty of the natives could so effectually be secured? Were the Chamber to be content with insisting upon the necessity of humanely treating the natives during their confinement, they would find everybody whose opinion was worth the having in accord with them. To secure for the natives, however, an uncontrolled freedom of movement in and out would carry with it many disadvantages. At present the natives, during their short terms of exile, are cared for in every possible way. Unless the accounts, written from personal observation, are complete fabrications—and this it is more than impossible to believe—they are a good deal better off inside the pailings than they would be out. For the rest, their incarceration is wholly a matter of their own individual choice. They are free to engage themselves or not as they may wish.

RAILWAY progress in New South Wales is growing apace. According to the Commissioners' report for the year ending June 30, 1894, there were at that date 2501 miles of line in use in the colony, the cost of which was £35,855,271, of which amount debentures to the value of £1,248,975 have been finally

paid off. Several of the branch lines are worked at a loss, owing to the sparseness of the population in the districts traversed, but with the progress of settlement, better results will be obtained. The admirable manner in which the New South Wales railways are managed is shown by the fact that, although the last two years have been marked by widely-spread financial and commercial depression, which have had the effect of largely paralysing business and industrial enterprise, and, consequently, diminishing the annual gross amount of railway earnings, yet the net earnings, after paying working expenses, were greater in 1894 than in 1888, a result of prudent economy and retrenchment, unattended with any diminution in the rate of wages In 1888 the net earnings were £764,573; in 1894 they had become increased to £1,221,699. In 1893 the gross revenue was £2,927,056; in 1894 it had fallen to £2,813,541, a decrease of £113,515; but a reduction of the working expenses by £146,674 left the net result in 1894 £33,159 better than in 1893.

OUR CITY ARTICLE.

FRIDAY EVENING.

THE MINING MARKET.

West Australians booming.—Gold Fields continue to rise.—A successful settlement.—South African shares dull.—Australians strong at the close.

NONE needs to be told that the feature of this week has been the phenomenal boom in West Australian shares, which gives every sign of augmentation in the near future. At the opening on Monday the market was exceedingly flat, owing to the near approach of the settling day. In Australian shares a small set-back occurred, not, however, of a kind to last for long. For the moment, however, most of the better known shares in this section experienced a small loss. There was greater strength in the Indian department than elsewhere, the principal shares, such as Champion Reef and Nundydroog, being somewhat in demand. There were a fair number of exceptions to the generally duller tone of the South African market. Flatness, however, was certainly the prevailing characteristic. The principal feature in both markets on Tuesday was the shaking out of weak bulls in view of the impending settlements. This over, both departments acquired a steadier and more healthy characteristic, though the business done was not upon any large scale. Most of the Australian shares, which had been a trifle off in the morning, regained their strength later in the day, and closed firm. South African shares were quietness itself, all the interest being directed towards the settlement to commence on the succeeding day. Though Wednesday's carry-over was a large one, no difficulties were experienced in conducting it. West Australian Gold Fields went over at 2½. The South African account was a light one, owing to the concentration of interest elsewhere, and the rates were lighter than usual. Upon the recommencement of operations there were considerable dealings in West Australian shares, where the tone was still stronger. Improvements were registered in nearly all the shares of the section. South African shares were somewhat quieter, but generally the tone was fairly firm. Golds and Diamonds were rather stronger, but Lands were somewhat easier. At the reopening on Thursday West Australian Gold Fields continued to rise in unabated strength. Upward movements occurred in nearly all shares quoted in the market. There was every indication of a prospective continuation and increase of the public faith in these companies. A good deal of excitement prevailed in the market throughout the day. and business was very brisk. South African shares remained extremely dull, all the interest being directed to the West Australian department where, at the close, things looked extremely promising.

British Mines.

There has not been any life in the Cornish share market this week, and business has been very limited. Dolcoath have fallen to 68½, and it is generally supposed that at Tuesday's meeting a loss will be shown; still, the mine is now in a position to return 50 tons per week, and this, with tin at £44, leaves a fair margin of profit. The outlook at the bottom of the mine is all that can be desired. Killifreth are steady at 57s. 6d. Carn Brea are quiet, with buyers at 6¾, and sellers at 7. West Kitty are lower at 6¼. Grenvilles have been offered at 18, but close buyers. A move in tin is wanted to give confidence to our market, for with common tin ore selling at £40 our mines cannot work at a profit. Risen: None. Fallen: Carn Brea, 5s.; Dolcoath, £3; East Pool, 10s.; Tincroft, 5s.; West Frances, 10s.; West Kitty, 10s.; Wheal Agar, 5s.; and Wheal Kitty, 10s.

South African Shares.

The approach of the settlement exerted a quietening influence on the South African market at the commencement of the week. Stanhopes, Simmers, and United Roodepoort were the most active shares in the market, which all registered rises. Henry Nourse and Gold Fields Deep were continuously enquired for, the latter hardening to 1 3-32. Relapses not exceeding ⅛ occurred in Heriot, Jubilee, Jumpers, Langlaagte, and Village Main Reef. Paris sold Robinson, which declined 3-32 to 6¾, and May Consolidated eased off 1-32. In other directions Aurora hardened to 7s., Geldenhuis Main Reef to 13s. 6d., and Virginia (Transvaal) to 4s. 3d. Diamond shares were rather off colour, both De Beers and Jagersfontein moving down, the former ⅛ and the latter ¼. Chartered were fairly strong at ¼. Kaffir shares were extremely quiet on Tuesday, in prospect of the carry-over. United Roodepoort were firm, and rose 5-32 to 3⅞. A small improvement also took place in Robinson, which were a trifle harder at 27-32. City and Suburban hardened, and touched 15¾, Geldenhuis Deep and Gold Fields Deep being each ⅛ harder, the last mentioned finishing at 22s. 6d. bid. Glencairn and Moodie also improved a trifle. The shrinkage affected Champ d'Or, Geldenhuis, Heriot, Jumpers, Kleinfontein, Langlaagte, Rietfontein, Simmer and Jack, and Wemmer, relapses generally measuring ⅛. Both the chief diamond shares rose ⅛. The account in South African shares was a light one, and gave rise to no difficulties on Wednesday. But little improvement in prices was shown by this section as compared with the last making-up. Jagersfontein had taken largest upward move, the figure being 14⅜ against 13½. A gain of ¼ was also shown in De Beers. Among the declines were Crown Reef and Village Main Reef, which both receded ⅛, City and Suburban, Langlaagte, Jumpers, and Wolhuter also going over a trifle lower than at the last account. As a result of the operations for the new account, Cities revived to 15⅞; Kleinfontein, Langlaagte Royal, Wolhuter, and Worcester rose ¼; and Geldenhuis Estate and Main Reef, Van Ryn, and Buffels slightly improved. Gold Fields Deep were again enquired for, and strengthened to 1 5/16. Consolidated Gold Fields Debentures experienced a demand, and accordingly were somewhat stronger. South African shares continued quiet on Thursday. Chartered were still weaker, and closed at 36s. 9d. A gain of ¼ was registered in Rietfonteins, and of ⅛ in Robinsons, while Geldenhuis Deep, Gold Fields Debentures, and Gold Fields Deep were rather firmer. Recessions occurred in Crowns, Henry Nourse, Langlaagte, and Rand Mines. South African shares have been much better after the carry-over, and to-day they have been strong and active all round. One of the features of the day has been Sutherland Reefs, which rose from 5s. 6d. to 8s. Lands have been dull. Among diamond shares, De Beers were a little firmer; but Jagers were rather off colour.

Risen: African Consolidated, 3d.; Afrikander, 1s. 3d.; Aurora, 1s. 6d.; Bantjes, 6d.; Buffelsdoorn, 2s.; City and Suburban, 2s. 6d.; De Beers, 5s.; Durban (allowing dividend), 6d.; Ferreira, 2s. 6d.; Geldenhuis Estate, 2s. 6d.; Geldenhuis Main, 6d.; Grahamstown, 1s.; Joe's Reef, 6d.; Klerksdorp, 6d.; Klienfontein, 1s. 3d.; Meyer and Charlton, 2s. 6d.; Moodie, 6d.; New Chimes, 1s. 3d.; New Jagersfontein (allowing dividend), 2s. 6d.; New Primrose, 2s. 6d.; Nigel, 3s. 9d.; Ophir, 6d.; Princess, 1s. 3d.; Rands, 2s. 6d.; Rietfontein, 5s.; Robinson, 2s. 6d.; Sheba (allowing dividend), 3s.; Simmer and Jack, 2s. 6d.; Stanhope, 5s.; Sutherland Reef, 3d.; Transvaal Coal, 6d.; Transvaal Exploration, 5s.; United Roodepoort, 3s. 9d.—Fallen: African Gold Recovery, 1s. 3d.; Barrett, 3d.; Bechuanaland, 1s.; Central Zoutpansburg, 3d.; Consolidated Gold Fields, 1s. 3d.; Crown Reef, 2s. 6d.; Gold Fields of Mashonaland, 2s. 6d.; Graskop, 3d.; Griqualand, 2s. 6d.; Harmony Preferred, 1s.; Henry Nourse, 1s. 3d.; Johannesburg Pioneer, 2s. 6d.; Jubilee, 5s.; Jumpers, 2s. 6d.; Langlaagte, 2s. 6d.; Lisbon, 3d.; May, 1s. 3d.; South African Exploration (allowing dividend), 7s. 6d.; Spitzkop, 1s.; Transvaal Estate, 1s.; Worcester, 1s. 3d.

Miscellaneous Shares.

This market at the opening on Monday was exceedingly flat. The proximity of the settling day was responsible for this. It was only to be expected that there should be a slight set-back, but it is not all likely to be permanent. West Australian Gold Fields receded to 3⅛, West Australian Exploration relapsed to 1 13/16, Mawson's Reward to 1 7/16, and Hampton Lands were about ⅛ lower at 2⅝. A fall of 1s. occurred in Bayley's Reward, to 21s., and White Feather eased off 1-32 to 1⅞. West Australian Concessions, however, rose 1/16 to 1 1/16. Champion Reef and Nundydroog were enquired for after the fall. Slight advances also occurred in De Lamar, Elkhorn, Kempinkote, and Orita. The weaker element in the South African market continued to be shaken out on Tuesday, in view of the approaching settlement. Subsequently, however, there was some re-accession of strength, promising well for the new account. Bailey's Reward, after a drop to 19s. 6d., closed at 21s. West Australian Gold Fields, after having been sold at 3, were again quoted at 3 3/16, and White Feathers were bought at over 1¾. Mawson's Reward remained firm at 1 7/16, and Great Boulder at 20s., while Hampton Lands hardened to 2⅛ buyers. Golconda excited a good deal of attention. The shares changed hands at one time of the day at 27s. 6d., and closed slightly under that figure. Relapses occurred among most of the cheaper shares, which included Balaghat, Elkhorn, Idaho, Jay Hawk, Kapanga, Macate, Montana, New Queen, Nine Reefs, and South-East Mysore, all of which fell to some trifling extent. Rio Tinto recovered ⅛ to 15½. The making-up prices in the West Australian section on Wednesday exhibited a rise of £1 in West Australian Gold Fields, of 2s. 3d. in Bayley's Rewards, and of ⅛ in Hampton Lands. Dealings for the new account recommenced briskly. West Australian Gold Fields finished ¼ higher on the day at 3 7/16. Another rise of ⅛ also occurred in Hampton Lands. Mawson's Reward closed at 1 7/16, White Feather at 1 13/16, and Great Boulder at 1 1/16. There was a fair amount of business transacted in Indian shares. Gravel Gold, Mysore West, and Mysore Wynaad going up a fraction. Rio Tinto closed at the same figure; but Namaqua and Quebrada fell 1-16. At the opening of the market on Thursday, West Australian shares continued to boom. Bayley's Reward hardened to 23s. 1½d. Subsequently there was a small reaction, and the shares closed at 6d. or 9d. better on the day. Explorations were firm at 1 13/16 Mawson's at 1⅛, while Hampton Lands improved to 2 1/16. Other sections of the Miscellaneous Markets were quiet. There were improvements in Broken Hill Proprietary, Mysore West and Wynaad, Day Dawn Block and Idahos. Recessions took place in Champions, Mysore Reefs, Montanas, Harquahalas, Del Reys, Graskop, and Spitzkop. West Australian shares have continued throughout to-day at their best. Rises have been fairly general. Gold Fields were quoted at 3 1/16. Elsewhere there was little doing. Indians were dull. At the close, the prospect for business was an extremely good one.

Risen: Aladdin, 2s. 6d.; Baker's Creek, 1s. 3d.; Brilliant (allowing for dividend), 9d.; Colombian Hydraulic, 6d.; De Lamar, 6d.; Dickens Custer, 6d.; Eaglehawk, 6d.; El Callao, 2s. 6d.; Golden Leaf, 1s. 3d.; Gravel Gold, 6d.; Holcomb, 3d.; Kangarilla, 3d.; Mill's Day Dawn (allowing for dividend), 6d.; Montana, 1s.; Mysore West (allowing for call), 1s. 6d.; Orita, 3d.; Pahang, 1s.; Tolima B., 5s.; United Mexican, 1s. 3d.; Golconda, 1s. 3d.; Hampton Land, 6s. 3d.; Mawson's Reward, 3s. 9d.; West Australian Consolidated, 2s. 6d.; West Australian Gold Fields, 7s. 6d.; White Feather, 5s. Fallen.—American Belle, 3d.; Australian Broken Hill, 3d.; Balaghat, 3d.; Bonnie Dundee, 3d.; Brilliant Block, 1s. 3d.; British Broken Hill, 6d.; Broken Hill Proprietary, 1s. 3d.; Cape Copper, 2s. 6d.; Copiapo, 1s. 3d.; Frontino (allowing for call), 1s. 6d.; Golden Feather, 6d.; Golden Gate, 6d.; Gold Fields of Mysore, 1s.; Jay Hawk, 6d.; Kapanga, 3d.; Macate, 3d.; Mysore Harnhalli, 3d.; Mysore Reefs, 6d.; New Guston, 1s. 3d.; Nine Reefs (9s. 6d. paid), 6d.; Nine Reefs (fully paid), 3d.; Nundydroog, 1s. 3d.; Palmarejo, 1s. 3d.; Pestarena, 9d.; Pinos Altos, 6d.; Poorman, 3d.; Quebrada, 2s.; St. John Del Rey, 2s.; South-East Mysore, 6d. Victory, 6d.; Waihi Gold, 1s. 3d.; Wentworth Ordinary, 1s.

THE reports, for the first six months of 1894, from all the lead producers in the United States, show a total of 102,382 tons against 111,926 tons for the corresponding period last year. The amount refined in bond was 21,392 tons against 12,230. A heavy falling off occurred in the quantity of lead drawn from domestic sources.

THE Secretary of State's decision regarding the Burma Ruby Mines question is that the present lease, which expires in 1896, shall be allowed to run its course, two lakhs out of the yearly rental of four being suspended, but the other two to be paid without fail. The question of the renewal of the lease and the recovery of the 10 lakhs rental arrears are to be considered in 1896.

DR. J. W. EVANS, who has been appointed Senior Geologist and Analyst of the Mysore State Geological Department, has been directed by Government to inspect all mines in the State, including all works and plants, and to obtain samples of quartz., &c., from the officers in charge of such mines.

NEW ISSUES.

THE CONSOLIDATED GOLD MINES OF WESTERN AUSTRALIA (LIMITED).

SOME weeks ago we announced that a new West Australian Company was about to be floated, the guiding spirit of which was Mr. Albert F. Calvert. We then stated that the name of it was to be "The Gold Mines of Western Australia." We find, however, that this has been changed to "The Consolidated Gold Mines of Western Australia, (Limited)." The capital, on the other hand, is the same, viz., £90,000, divided into 90,000 shares of £1 each, of which £25,000 are now offered for subscription.

In the article in question, which appeared in our issue of Aug. 25, we published such full particulars that we cannot add much that is new. Those particulars, of course, we stated were obtained from official sources, supplied by Mr. Calvert himself. Now we have before us the complete list of directors, and we notice among them influential gentlemen. These are as follows:—The Maclaine of Lochbuie, J.P., D.L.; Mr. F. E. Harman, F.G.S., F.C.S., M.I.M.M.; Lieut.-Colonel F. Henderson; Mr. C. J. Innes Ker; and Mr. Arthur Dewar. Mr. Harman we know to be a well known and experienced mining expert, of unblemished reputation, whilst the firm of Messrs. Bainbridge and Seymour, of St. Helen's-place, are known all the world over.

"The company has been formed, 'the prospectus states,' for the purpose of acquiring and working the 'Coongan' Mine, situated in the Pilbarra district, Western Australia, and that the property has the advantage of being a going concern, equipped with plant capable of treating over 100 tons weekly, and already proved to a depth of 121 feet. The company will also prospect, acquire, develop, and work gold, precious stones, and other valuable mineral properties in Western Australia.

"The property consists of an 18 acre gold mining lease held under the West Australian Gold Mining Act direct from the Government, and is situated on the Marble Bar Gold Field in the north-western district' close to the Coongan River. The mine is fully equipped with plant and machinery capable of treating 100 tons of ore a week, nearly £10,000 having been spent by the present owners in opening up and developing the mine and erecting plant. There are three well-defined reefs on the property, one of which has been proved over 1000 feet in length, to a depth of 121 feet, and averages from 4 feet to 7 feet in width. There are also several counter lodes intersecting these reefs at right angles. The ore is free milling, there is a good supply of water, and timber is plentiful, all matters of the highest importance in securing the economical working of the mine. Over 1000 tons of ore have been extracted from this mine, which have given over 2 ounces to the ton, while a large quantity of ore from the No. 2 reef has given 4 to 5 ounces."

In answer to a telegram sent at the suggestion of the directors, asking for latest particulars with regard to the Coongan Mine, the following report, dated September 15, 1894, has been received at the London offices of the company from Mr. Neil Galbraith and Mr. J. Church, the mine manager, who have just returned to Roebourne from a visit to the property:—

"Coongan Mine lode 7 feet. Estimate of ore reserves, 153,000 (one hundred and fifty-three thousand) tons. Over 1,000 treated 2 ounces per ton. The loss in tailings in consequence of there being no concentration works 50 per cent. The shaft has been sunk 100 feet. Water in any quantity obtainable; expenditure £200. New pump boiler engine, 40-horse power; two Huntington centrifugal roller quartz mills are in good working order—can crush 100 tons per week; large stock, tools, and fittings.

(Signed) NEIL GALBRAITH.
(Signed) J. CHURCH.
Mine Manager.

"The intention of the directors, 'the prospectus states,' is to increase the present milling capacity to 250 tons weekly at once, in accordance with the recommendation of their engineer, and to add thereto as the mine opens up. From the last cabled reports it will be seen that there is enough ore reserves to last ten years, even when the capacity of the crushing plant is doubled as proposed. Taking this as worth only one ounce per ton (less than half the value of the 1000 tons crushed to date), the value of the quartz is considerably over half a-million sterling. Even at the present rate of working and yield the gold produced will give a gross value of £45,000 per annum, which, after deducting ample working expenses, should leave a very large margin for profits."

"Besides the above property which this company has purchased, the directors have secured the right of acquiring several important discoveries made by Mr. A. F. Calvert in the course of his explorations, 1890 to 1893. The most valuable of these he purposes on his return to the colony to secure on behalf of this company, as also any others he may make in his further exploration of this auriferous district; and it may be stated, that in addition to gold reefs, Mr. Calvert has discovered rich deposits of tin, and what he believes will prove to be valuable diamondiferous ground. These, when taken up, will become the property of the company, and will add, it is expected, considerably to its resources and ultimate profits. It is not, however, the present intention of the directors to work these outlying properties themselves, but to dispose of them as opportunity offers, so that the company will in reality become *quoad* these, a parent company."

REPORT BY MR. A. F. CALVERT.

This property, which consists of one 18-acre gold mining lease, held under the West Australian Gold Mining Act, direct from the Government, is situated on the Marble Bar Gold Field, in the north-western district, close to the Coongan River, and is distant about 100 miles from a good sea port. The country between the coast and the mine is level, and there is a good water supply.

Description.—The quartz lodes (of which there are several) are strongly charged with iron, while one has a somewhat galenic appearance, the quartz, which is free milling, showing occasionally an appreciable quantity of free gold. There are three well-defined reefs dipping to the south west, and the claims have been pegged out so as to secure the dips of the lodes. Reef No. 1, which has a width of from 4 feet to 4 feet 6 inches, is situated near the northern boundary of the estate, and has been proved by several shafts for a distance of over 1000 feet, and for a depth of over 50 feet. 121 tons of quartz taken from this reef gave a return of 259 ounces.—Reef No. 2. A large quantity of stone has been raised from this reef, giving 4 ounces to 5 ounces to the ton.—Reef No. 3. This reef is as yet only proved to have a width of 1 foot, which, however, shows gold throughout. There are also several leaders on the property showing visible gold.

Machinery.—The owners have already expended nearly £10,000 in developing the property and erecting two 3 feet 6 inch Huntington mills, one 15 horse-power boiler and engine, one quite new 40 horse-power boiler and engine (just erected), Dodge rockbreaker, pump, complete blacksmiths' outfit, and duplicate parts of most of the machinery, with buildings and other things too numerous to mention. The present machinery is capable of treating 120 tons per week, but the average would be about 100 tons per week.

Crushings.—Over 1000 tons of ore have been treated from this property, and have given a return of an average of 2 ounces of gold to the ton. For the last few months the mills have been crushing for other owners, during which time the mine has been still further developed, and a large quantity of ore is now awaiting treatment.

Water.—The owners of the Coongan claim have also obtained a machine site on the Coongan River, 2½ miles distant from the mine in a westerly direction, where they have best available ground, and a plentiful supply of water for mining and household purposes. A good supply of water has also been struck close to the reefs.

Timber.—Plenty of timber for machinery and firewood purposes can be obtained near the Coongan River close by.

Labour.—The wages at present paid are £4 per week for miners, and £3 10s. per week for top men and hammer men, but owing to the large number of miners arriving in Western Australia from the Eastern colonies every week, it is expected that these high wages will shortly be reduced.

Geologically.—The Coongan River traverses this district in a nearly north and south direction, and winds through a valley which has been formed by the softer Devonian schists yielding to the abrasion of the water, whilst the harder sandstones to the west, and the granitic outcrop to the east, were better able to hold their own against the water grooves of ages. In the schistose slopes of this granitic range, and in close proximity to the river, and running up the valley in a north and south direction, is a very strong system or belt of quartzose veins. On the western side of this belt may be seen, occasionally, bosses of diorite (greenstone), and where these greenstone intrusions come in contact with this belt evidences of great disturbances may be seen; the veins become contorted and are severed from their natural direction towards the granite, and show evidences of decomposition and alteration at those points, which may be seen by the occasional patches of serpentine and talcose matter. It is at these points where large accumulations of auriferous ore may be looked for. Leaders and bunches of gold will traverse the veins where they are most contorted, and will make against the serpentine with great strength and richness. It is in one of these ins rusions, where a strong mass of diorite (greenstone) has thrown all the veins into apparent confusion, that the Pilbarra lease is situated. There are three reefs on this property, running north west and south-east, and there are also several counter lodes which intersect these reefs at right angles, and at a point of juncture will, in all probability, form more or less extensive shoots of gold, and when the Coongan mineral areas are properly and systematically worked, its rich bunches and pockets developed, very valuable results must necessarily follow. The great fissure vein shows enormous strength, often cropping out boldly to the surface,

Conclusion.—Taking into consideration that this fissure vein has been proved by several shafts and sinkings to extend for over 1000 feet, I have no hesitation in stating that, worked on an adequate scale, this mine will prove one of the most profitable on this extensive gold field, and I would recommend that the present machinery and appliances be forthwith doubled, so as to treat something like 200 tons per week.—(Signed) ALBERT F. CALVERT.

WEST AUSTRALIAN EXPLORING AND FINANCE CORPORATION (LIMITED).

The capital of this company is £200,000 in 195,000 ordinary shares of £1 each, and 5000 deferred shares of £1 each. The prospectus states that the company "has been formed to carry out the usual objects of an exploring and finance corporation, and in general to undertake and carry on any business transactions or operations commonly undertaken or carried on by financiers, banks, promoters, concessionaires, underwriters, and contractors.

The company will make it a special object to obtain options on or purchase approved mining leases, and develop and re sell the same; to assist owners of leases in developing their properties, obtaining from such owners in return a substantial interest in their mines; to establish such offices or agencies in the different districts of Western Australia, or elsewhere, as may be required for the successful carrying on of the company's business, and generally to act as a medium between investors in England, and the owners of sound undertakings in Western Australia; to negotiate the sale of properties, dealing only with such as are believed to be of a thoroughly *bona fide* character, and to promote or otherwise establish companies of a public or private nature for the purpose of acquiring and working, or otherwise turning to account, what are deemed to be desirable undertakings.

Valuable properties are often in the hands of individuals without means for efficiently working them, and it will be one of the objects of this company to acquire options on or interests in such properties on the most favourable terms. The company can then test the properties, which operation involves the expenditure of a comparatively small sum without further liability of any kind, and one success font of 10 or even 20 of such experiments should lead to lucrative results.

It is intended that properties of value secured as above mentioned shall subsequently be resold, or that separate companies shall be formed to take over such properties. The profits from resale will accrue to the shareholders of this company. These profits should prove to be very large.

The founder has contracted to assign to this corporation, or to separate companies formed by this corporation to acquire the same, several valuable gold mining properties in the celebrated Coolgardie and Murchison districts, some of which, according to reports, have large ore reserves already developed. The properties include the lease of the mines known as the "Mainland" and the "Last Chance" (now called the "Mainland Consolidated"), which have been described in a recent issue of the *Australian Mining Standard* as "the Bayley's of the Murchison." These mines have already yielded several thousand ounces of gold from the ore extracted during the progress of development, and in regard to a recent rich find in one of them the *Melbourne Argus* observes: "This new strike is said to rival in richness anything found at Coolgardie." The founder has also contracted to similarly assign several leases contiguous to the famous "Londonderry" Mine, Coolgardie, said to be the most remarkable gold discovery in the history of mining. The founder is also in daily expectation of advices announcing the successful completion of negotiations for the acquisition on most favourable terms of a very rich gold mining property, the name of which, for obvious reasons it is not advisable to publish. The benefit of these negotiations and of the resulting contracts will vest in this company. In regard to this property an eminent authority in a report on the developments observes, "I saw pieces of quartz broken out which were hanging together by bands and lumps of gold," and further, "a large quantity of stone could be raised quickly for battery treatment." £2000 worth of nuggets taken from this mine have been ordered to be shipped to the offices of this company. The foregoing properties are nearly all ready for immediate re-sale to separate companies. The benefit of such re-sales will inure to this corporation. Shareholders in this company will be allowed a preference in subscribing for the shares of these intended companies.

The consideration to be paid to the founder (who has incurred considerable expenditure and guaranteed part of the capital of the company) for contracting, on the terms of the agreement referred to below, to assign the above mentioned properties, without profit thereon to himself, is the allotment to him or his nominees of the 5000 deferred shares, to be credited as fully paid, and a right to subscribe for the remaining 45,000 ordinary shares, for which the company is to be paid par. The deferred shares will receive no dividend in any year until a dividend at the rate of 10 per cent. per annum has been earned and declared upon the ordinary shares. The remaining profits will be divided equally between the ordinary and the deferred shares.

Having regard to the valuable interests to be acquired by the company, as above mentioned, and to the nature of the business intended to be carried on, the directors feel justified in expressing the opinion that handsome dividends will accrue to the shareholders. As an evidence of the profitable nature of enterprises established on similar lines to those of this corporation, reference is made to the market value of the shares of the following companies, viz.:—

	Par value per share.	Market value per share. Sept. 20, 1894.
London and South African Exploration Company (Limited)	10s.	£11 0 0
Exploring Company (Limited)	£1	£4 17 6
Consolidated Gold Fields of South Africa (Limited)	£1	£2 7 6
Zambesia Exploring Company (Limited)	£1	£2 15 0
Exploration Company (Limited)	£1	£2 5 0
* West Australian Gold Fields (Limited)	£1	£3 5 0

* It is intended that this company shall work in harmony with the West Australian Gold Fields (Limited), and also with the London and Western Australian Exploration Company (Limited).

The only contract entered into by the company is an agreement dated September 20, 1894, and made between Whitaker Wright of the one part, and the West Australian Exploring and Finance Corporation (Limited), of the other part, providing for the allotment of the deferred shares for the considerations above mentioned. As this is the only agreement to which the company is a party, applications for shares will be received subject to the condition that the applicant waives the insertion in this prospectus of the particulars of any contracts that may have been entered into by the founder, and any other contracts that may come within the meaning of the 38th section of the Companies' Act, 1867, or otherwise. The above-mentioned agreement and the Memorandum and Articles of Association can be inspected at the office of the company's solicitors.

A Stock Exchange quotation of the company's shares will be applied for as soon as possible.—[ADVT.]

THE AUSTIN GOLD MINES (LIMITED).

This company is formed with a capital of £50,000, in 50,000 shares of £1 each, of which 25,000 are offered for subscription. The prospectus states:—"This company has been incorporated to acquire certain valuable gold mining properties in Western Australia known as the 'Golden Gate,' 6 acres; 'Mons Meg,' 6 acres (both held under lease), and Austin, about 24 acres (which includes the North Golconda), for which application for a new lease has been made to and accepted by the Government, the whole comprising a total area of about 36 acres. These properties are situate in the Murchison Gold Fields, Western Australia, on the Island, Lake Austin, about 100 yards from the Golconda Mine, on the same line of reefs, and about 18 miles from Cue. The Murchison district ranks as one of the most important and promising of the Western Australian Gold Fields." A report on the various properties by Mr. R. Gregory is very flattering. The reef in the Golden Gate, he says, is clear and well-defined, averaging from 2 to 3 ounces per ton, and should average from 4 to 5 ounces. By securing the Austin Mine he points out that the company's south boundary is only 100 yards from that of the Golconda Mine, and that the Golconda reef runs through the property. He also states that the ore is easy to crush and to treat, and that there is an ample supply of salt water for all purposes. A report by Mr. W. G Gibson is equally encouraging. "On the west side of the Austin property, he says, there is a reef running through it, entering from the south, called the Golconda reef, as it is a continuation from that celebrated mine. On this line of reef, towards the north end of the Austin, a shaft of 15 feet shows a very nice compact reef, 5 feet wide, running about north and south with a westerly dip at 70° from the horizon. In the face of the lode I had several drill holes put in. On washing the drillings, I found very good results in gold from all of them, especially the hanging wall and casings, which, it seems to me, may be an extension of the lode, which seems to be widening in that direction. I am informed by Mr. Aldridge that about 1100 ounces of gold have been obtained by surface working and dollying from the mine." One conspicuous feature of this new company is, as will be seen, the smallness of its capital—undoubtedly a great point in its favour.

MINING IN CORNWALL AND DEVON:

NOTES ON WESTERN MINING, EDITORIAL AND OTHERWISE.

(BY OUR SPECIAL CORRESPONDENT.)

NOTHING new and nothing good can be said regarding the position of the Cornish mining industry. It is still a case of "hope deferred," and the hearts of adventurers are getting very sick indeed, thankful as they may be for the small mercy—infinitesimal at present of a slight rise in the price of metal. Mr. Strauss did not enlighten us to any extent, though to many Cornishmen the news that South Africa may possibly become a serious factor in the production of tin will come as a surprise. This statement has aroused a good deal of interest in Cornwall, which yearly sends a tribute of its best bone and sinew to the Transvaal and other African mining regions. Mr. Strauss will probably be asked to give his Cornish friends fuller information on this matter when next he visits the county.

THE share market is, if anything, weaker, as a necessary result of the absence of business, prices in one or two instances having been forced by holders who persisted in realising. There was, however, a remarkably good ticketing on Tuesday, in spite of the slight drop in tin on Monday and the following day. The average price was £41 3s., an increase of 12s. on the previous ticketing. The quantity—252 tons—was rather larger than for some time, in consequence of Dolcoath having resumed its old position at the top of the ticketing paper with a parcel of 50 tons There was very good competition, and the parcels were more evenly divided up between the smelters than usual. Dolcoath secured the highest price with a small parcel of 5 tons, which fetched £46 17s. 6d.

EAST POOL meeting can only be regarded as eminently satisfactory, especially under the adverse circumstances of the past three months. The profit of £671 on the sale of mineral is as much as could reasonably be expected—indeed, more than was generally anticipated. But East Pool, like its near neighbour, Tincroft, is, fortunately, able to assist its credit account with large sales of arsenic and a little copper. But for their arsenic the shareholders would have found a balance on the wrong side of the accounts more than once—on the present occasion to the tune of something like £700. The mine is being vigorously developed, and Captain Bishop has an object in view which, if his expectations are realised, will put the mine in a better position than she has occupied for a long time. The engine shaft is being sunk with a view to discovering the junction of the north lode with the great lode, and in order that the work may be carried out expeditiously, the manager has resorted to a method which has been adopted in many mines, and which has everything to commend it. Instead of sinking with a pare of men on tutwork, Captain Bishop has set 10 fathoms to be sunk by contract, which has been taken by a responsible man in the mine, who has full power to carry on the work with men selected by himself. The advantage of such a method is obvious; the men have a certain fixed amount per fathom for sinking, and it is, therefore, to their advantage, quite as much as to that of the shareholders, that the work should be carried out as expeditiously as possible. The efforts which have been made by the committee to obtain a modification in favour of the shareholders of the terms of the new lease granted by Mr. Arthur Basset have proved unavailing, and there is now no alternative but to accept Mr. Basset's offer. If we remember rightly, the lease, though not an ideal one according to the ideas now prevalent, would have been gladly accepted by any body of adventurers only a few years ago.

ENQUIRIES are being made by several people interested as to what has become of the Atlas Tin Mining Company (Limited), the shareholders of which have apparently not been called together for a considerable time. The Atlas Mine is one of the few tin mines in Devonshire, and has been worked for three or four years by a small limited company, of which Captain Josiah Thomas is the managing director. The last we heard of the affairs of the mine was towards the end of 1892, when the shareholders decided to increase the capital by 2400 new £1 shares. Some of the shareholders seem anxious to obtain some information as to the present position of the concern. Perhaps the directors will enlighten them.

THE METAL MARKETS.

LONDON METAL MARKET.

THE METAL MARKET, LONDON, SEPTEMBER 28.

Copper

THE prevailing note of the present week's speculative market has been its steadiness, notwithstanding the comparative unimportance of the transactions and the fact that demand for consumption has only been on a moderate scale. On the other hand, the cable reports from America continue very firm, and our market closes at a slight gain over last week's final quotation. The course of the speculative market was as follows;—On Monday the tendency at the opening was firm, and £42 three months was done, followed by £42 1s. 3d., whilst cash G.M.B.'s changed hands at £41 11s. 3d. to £41 13s. 9d. On Tuesday America sent lower quotations, and we had a decline here to £41 7s. 6d. s.c., and to £41 15s. three months. Wednesday brought a recovery in value, and a renewal of the firmer tone. £41 12s. 6d. was paid for s.c., whilst three months realised £42 2s. 6d. Yesterday's transactions were at £41 15s. to £41 18s. 9d. s.c., and £42 2s. 6d. to £42 three months, and to-day's at £41 11s. 3d. s.c., and £42 1s. 3d. £41 17s. 6d. three months, the market closing firm at £41 11s. 3d, £41 12s. 6d. s.c., and £41 17s. 6d. to £42 three months. The total turnover for the week was about 2750 tons.

Tin.

The tin market opened quiet and lower on Monday at £71 15s. s.c and three months Straits, and declined to £71 10s. On Tuesday a desperate effort was made by the "bear" operator to knock prices down, but with only partial success, the market quickly recovering—after £70 17s. 6d. s.c., had been done—and rising on Wednesday to £72 10s. The transactions for these three days averaged about 300 tons per day. Before Wednesday's close the value again lost ground—to the extent of 10s.—in consequence of the sales made, and on Thursday, after a momentary rally to £72 2s. 6d. s.c. and £72s. 5s. three months, the former position went back to £71 15s., the opening value for the week. To-day the market was again easier, and business was recorded at £71 5s. and £71 2s. 6d. s.c. and £71 10s. three months. The market closes quiet at £71 to £71 5s. s.c., and £71 5s. to £71 10s. three months Straits. In the Dutch market the chief event of the week was the sale of Banca yesterday, which opened firm at 43½ fl., touched 43 fl., and closed at 43½ fl. very firm. To-day the quotation is 43⅜ fl. Billiton opened at 43⅜ fl., and has gone down to 43¼ fl., at which it closes.

Pig Iron.

Scotch shipments last week are given as 3,569 tons, or 338 tons over the same period of last year. The Glasgow market opened on Monday at 43s. 4d., and has since fluctuated gently between 43s. 6d. and 43s. 3½d., and closing at 43s. 3½d. s.c. Scotch sellers. Hematite and Middlesbrough are respectively quoted 44s. 1½d, and 36s. 2½d.

Lead

has been a quiescent market, and prices have ruled very steady at about £9 16s. 3d., at which price business in soft foreign has taken place. The close is quiet at £9 16s. 3d. to £9 17s. 6d. soft foreign, and £10 English.

Spelter.

The monotony of this market has been unbroken by any fresh phase, the value continuing steady at £15 7s. 6d. to £15s. 8s. 9d, ordinaries, and £15s. 10s, £15 12s. 6d. specials,

Antimony

is firm at £32 10s. to £33 10s.

Quicksilver.

First hands still quote £6 15s., and seconds are 6d. dearer at £6 12s. 6d.

The following are to-night's (September 28) prices of metals:—

	£ s. d.	£ s. d.
Copper.		
Tough cake and ingot	44 5 0	44 12 6
Best selected	45 15 0	45 5 0
Sheets and sheathing	—	53 0 0
Flat bottoms	—	56 0 0
Chili bars		
Good merchantable, spot, & 3 months respectively	41 11 3	41 17 6
Copper tubes, seamless	—	0 0 7½
Alloys.		
BRASS: Wire	—	0 0 5½
,, Tubes (solid drawn)	—	0 0 8
,, Sheets	—	0 0 6
PHOSPHOR BRONZE: Alloys II.	—	78 0 0
,, ,, III. or V Cog Wheel Brand	—	81 0 0
,, ,, VII.	—	83 0 0
,, ,, XI.	—	78 0 0
,, ,, Vulcan brand A1	—	72 0 0
DURO METAL	—	73 0 0
BULL'S METAL	—	65 0 0
Ferrobronze (Vivian's).		
Ingots ...per lb.	0 0 5½	—
Ordinary sheets, plates, bolts and bars	0 0 6½	—
Screw bolts and nuts	0 0 8	—
Pump rods, plain	0 0 7	—
,, finished	0 0 10	—
DELTA METAL: No. 4 (per ton)	—	73 10
,, Sheets and plates (per lb.)	0 0 10½	—
,, Bars, round, square, flat (per lb.)	0 0 9½	—
,, ,, hexagon (per lb.)	0 0 9	—
Tin.		
English, ingots, f.o.b.	74 0 0	74 10 0
,, bars	75 0 0	75 10 0
,, refined	76 0 0	76 10 0
Straits, spot and 3 months respectively	71 2 6	71 7 6
Australian spot, and three months respectively	71 7 6	71 12 6
Banca ,, (in Holland)	72 17 6	73 0 0
TIN PLATES: Charcoal, best quality per box	0 18 6	0 18 6
,, ,, ordinary	0 14 0	0 15 6
,, Coke, best quality	0 10 6	0 11 0
,, ,, ordinary	—	0 10 3

These prices of tinplates are f.o.b. at Swansea; at Liverpool 6d. per box more.

Iron.		
Pig, G.M.B., f.o.b., Clyde, spot		2 3 3½
,, Scotch pig, No. 1 Gartsherrie		nominal
,, ,, Coltness		2 19 0
,, ,, Clyde		nominal
,, ,, Govan		2 5 0
Bars, Welsh, f.o.b. Wales		5 2 6
Plates ,, ,,		—
Bars, Staffordshire, at works		5 5 0
Sheets ,, ,,		6 10 0
Plates ,, ,,		6 5 0
Hoops ,, ,,		6 12 6
Ship plates, Middlesborough		—
STEEL: English spring according to quality	16 0 0	12 0 0
,, ,, cast ,, ,,	42 0 0	84 0 0
,, Rails at works, according to section	3 12 6	4 15 0
Lead.		
Spanish or soft foreign	9 16 3	9 17 6
English pig, common	—	10 0 0
,, L.B.	—	10 10 0
,, sheet and bar	—	11 0 0
,, pipe	—	11 10 0
,, red	—	12 5 0
,, white	—	16 10 0
,, patent shot	—	14 0 0
Spelter.		
Silesian ordinary brands	15 7 6	15 8 9
,, special brands	15 10 0	15 12 6
English Swansea	16 0 0	16 2 6
Sheet Zinc	18 15 0	19 0 0
Antimony.		
Antimony	32 10 0	33 10 0
Quicksilver.		
Flasks, 75 lbs. warrants	6 12 6	6 15 0
Ore, c.i.f., U.K. ports	**Manganese.**	per unit.
1st quality, 50 per cent. and upwards	0 9 10½	0 0 11½
2nd ,, 47 per cent. to 50 per cent.	0 0 9	0 0 10
3rd ,, 42 ,, 47 per cent.	0 0 8	0 0 9
	Aluminium.	Per lb.
98-99½ per cent. (guaranteed 98 per cent. min.)	in ingots (1 cwt. lots)	0 1 9½
do do	(1 ton lots)	0 1 9
	Nickel.	
98-99 per cent. guaranteed	0 1 5	0 1 6

"THE MINING JOURNAL" SHARE LIST.

ABBREVIATIONS AND REFERENCES.—The following are the significations of the abbreviations and references which occur in the Share List:—*Ay*, Antimony; *A*, Arsenic; *Bl*, Blende; *Bx*, Borax; *C*, Copper; *D*, Diamond; *G*, Gold; *I*, Iron *L*, Lead; *M*, Mundic; *N*, Nitrates; *P*, Phosphates; *Q*, Quicksilver *R*, Ruby; *S*, Silver; *S-l*, Silver-lead; *Sul*, Sulphur; *T*, Tin; and *Z*, Zinc. * in the "called up" column of British Mines, signifies that the mine is conducted on "Cost Book" principles: † in the "Head Office" column of African Mines, signifies that the address given is not that of the head office, but of a sub- or transfer office and ‡, following the names of African mines, signifies that they are subject to the Limited Liability Law of the South African Republic.

The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct; we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

BRITISH MINES.

Name.	Closing Price, Sept. 28, 1894	Closing Price, Sept. 21, 1894.	Par.	Latest Dividend	Called up Per Share.	Amount of Stock or No. of Shares Issued	Situation of Mine.	Head Office
			£ s.		£ s. d			
Atlas .....T	—	—	1 0	—	1 0 0	12,000	Devon	Camborne.
Bine Hills ...CT	5/- 10/-	5/-	*	2/- May, '81	5 12 6	5,353	Cornwall	Camborne.
Botallack .....T	1 1¼	1	*	—	51 4 6	1,880	Cornwall	St. Just.
Carn Brea .....T	6¼ 7	6¼	*	2/6 Dec., '93	21 18 5	6,000	Cornwall	Carn Brea.
Cook's Kitchen ..T	2/6 7/6	2/6	*	—	35 15 10	4,900	Cornwall	Camborne.
Cumberland L	—	—	1 0	5% May, '88	1 0 0	51,588	Cumberland..	7, Angel-court E.C.
Derwentwatr.CLZ	—	—	1 0	—	1 0 0	10,450	Cumberland..	Manchester.
Devon Gt Cons.CA	20/- 25/-	20/-	5 0	3/- May, '94	2 0 0	10 240	Devon	8, Finsbury-circus.
Dolcoath .....T	68 69	70¼	*	12/6 Apr. '94	9 12 6	4,700	Cornwall	Camborne
Drakewalls CTM	-/3 -/6	-/3	0 5	—	0 2 0	61 856	Cornwall	Dashwood House.
East Grassington L	—	—	1 0	—	1 0 0	20,995	Yorkshire	5, Copthall-buildings
East Pool .....AT	8 8½	8¼	*	1/6 Sept, '94	0 9 9	6,400	Cornwall	Illogan.
Gawton .....CA	— —	—	2 10	—	2 7 0	12,000	Devon	20, Great St. Helens.
Great Laxey.....L	1 2	1	4 0	5/- Apr., '92	4 0 0	15,000	Isle of Man ..	Douglas, Isl of Man.
Green Burth ...L	1/3 1/9	1/3	1 0	-/6 June '89	0 19 0	32,000	Cumberland..	Newcastle.
Halkyn L	— —	—	1 0	2/- Sept, '94	1 0 0	10,000	Flintshire....	Chester.
Hexworthy .....T	— —	—	1 0	—	1 0 0	14,634	Devon	6 Queen-street-place
Isle of Man L	— —	—	5 0	2½ p c Sep. '94	5 0 0	14,000	Isle of Man ..	Chester.
Killifreth .....T	2¾ 3	2¾	*	2/- July, '94	5 11 6	6,000	Cornwall	Truro.
Leadhills L	12/6 17/6	12/6	6 0	3/- Sep. '92	6 0 0	20,000	Lanarkshire...	30, Finsbury-circus.
Levant .....CT	— —	—	*	2/6 July, '94	11 9 6	2,500	Cornwall	Penzance.
Lovell.....T	— —	—	*	1/3 Nov., '91	1 16 7	7,165	Wendron ...	3, Gt. Queen-st., S.W.
Minera.....L	— —	—	5 0	5/6 Mar. '90	5 0 0	9,000	Denbighshire.	Minera, N. Wales.
Nenthd'Tudie.LZ	-/6 1/-	-/6	1 0	6% Feb., '91	0 18 0	48,815	Northumberld	Newcastle-on-Tyne
New Balleswidd'nT	— —	—	1 0	—	1 0 0	25,000	Cornwall	St. Clement's Ho., E.C
New Cook's Kitn. TC	— —	—	*	—	10 18 3	4,900	Cornwall	Camborne.
New Minera	— —	—	1 0	1/- Oct., '92	1 0 0	30,000	North Wales...	6 Queen-street-place.
Phœnix United TC	1/- 3/-	1/-	*	1/- Mar. '90	7 4 6	10,666	Cornwall	Tigheard.
Polberro .....T	20/- 25/-	20/-	*	—	3 7 9	18,000	Cornwall	37, Walbrook.
So. Condurrow TC	10/- 15/-	10/-	*	3/6 Apr. '93	7 12 1	6,122	Cornwall	20, Great St Helens
South Crofty TA	1¾ 1¾	1¾	*	—	17 7 6	6,120	Cornwall	Pool, Cornwall.
S. Frances Untd. T	15/- 20/-	15/-	*	—	2 7 6	8,000	Cornwall	Redruth.
Tincroft .....T	11¾ 12	11¾	*	?/- Aug. '94	15 7 6	6,000	Cornwall	Carn Brea.
Weardale L	9/- —	7/-	4 0	1/3 Oct. '90	1 10 0	50,000	Durham.....	3, Lombard-court.
West Frances ...T	1 1½	1½	—	2/6 May, '89	18 0 7	6,144	Cornwall	Camborne.
West Kitty .....T	5 6¼	6¼	*	3/- Aug, '94	1 2 0	6,000	Cornwall	37, Walbrook.
Wheal Agar ..TA	2 2¼	2¼	*	2/6 Aug. '88	23 5 2	8,000	Cornwall	Redruth.
Wheal Basset ...TC	1 1¼	1	*	10/- Apr. '88	12 3 0	6,144	Cornwall	Redruth.
Wheal Friendly..T	-/6 1/-	-/6	*	—	0 12 9	10,000	Cornwall	1'0, Cannon-st., E.C.
Wheal Grenville T	18 19	17½	*	5/- Aug. '94	18 2 0	6,000	Cornwall	7, Union-court, E.C.
Wheal Kitty.....T	12/6 15/-	12/6	*	3/- Mar. '88	4 5 6	8,500	Cornwall	Truro.
Wheal Metal & F. T	⅜ ¾	⅜	*	—	0 13 9	10,784	Cornwall	14, Broad-street Av.

AUSTRALIAN AND NEW ZEALAND MINES.

Achilles Gld Fld.	2/6 3/6	2/6	1 0	—	1 0 0	80,307	New Zealand	3, Church Pas , E.C.
Aladdins Lamp G	1⅛ 1⅛	1⅛	1 0	1/- Apr. '54	1 0 0	100,000	N S Wales ...	4-5, Throg Avenue.
Amana (Went) G	— —	—	1 0	—	1 0 0	75,000	N. S. Wales ..	5 Throg Avenue.
Amana (Went) G	— —	—	1 0	—	0 12 6	25,000	N. S. Wales ..	5 Throg. Avenue.
Anglo-Saxon ...G	— —	—	1 0	2/- July, '89	1 0 0	51,000	Queensland ..	4 Lombard-court.
Australasian .....G	1/9 2/3	1/9	1 0	-/6 Mar., '92	1 0 0	210,000	Queensland ..	6, Queen-st. place
Australian C	— —	—	20 0	1/6 July '94	7 7 6	18,315	So. Australia	'o. Old Jewry Chbrs.
Aus. Bro. Hill Con.	1/9 2/3	2/-	1 0	1/- June, '91	1 0 0	537,138	N. S. Wales ..	Winchester House.
Baker's Creek ...G	1¾ 1¾	1⅝	1 0	1/- Sept. '94	0 17 6	105,000	N. S. Wales ...	Hillgrove, N.S.Wales
Bayley's Reward G	21/6 22/6 xd	22/6	1 0	-/4 Sept. '94	1 0 0	480,000	W. Australia...	7, Met. Ex. Buildings
Blue Spur & G. G.	-/6 1/-	-/6	1 0	—	1 0 0	80,098	New Zealand	6, Gt. St. Helens'
Bonnie Dundee G	3/- 3/8	3/3	1 0	—	0 18 0	120,000	Queensland ..	'o. Gracechurch-st
Do. Pref.....	— —	—	1 0	2/- May, '94	1 0 0	7,268	Queensland ...	3-5, Gracechurch st.
Brilliant..... .....G	12/- 13/- xd	11/6	2 0	-/3 Sept. '94	2 0 0	250,000	Queensland ...	Charters Towers.
Brilliant Block ..G	1¾ 1¾	1½	2 0	-/3 Aug. '94	2 0 0	250,000	Queensland ...	', Gracechurch-st.
Brilliant, St. Geo.	16/- 18/-	16/-	0 10	3d. Aug. 94	0 6 3	72,000	Queensland ...	Charters Towers.
Brit. Brok. Hill .S	3/6 4/6	4/-	5 0	—	5 0 0	240,000	N. S. Wales ...	Dashwood Ho., E.C.
Broken Hill Prop.	2½ 3⅛	3	8 8	1/- Aug. '94	0 8 0	960,000	N. S. Wales ...	D shwood Ho., E.C.
Brkn. Hill P. Bl.10	— —	—	10 0	1/- Feb. 94	9 13 0	100,000	N. S. Wales ...	117, Leadenhallst. EC
Brkn. Hill P. Bl.14	— —	—	5 0	—	5 0 0	30 ,000	N. S. Wales ...	117, Leadenhallst. EC
Carrington..... .....G	1/6 2/-	1/6	12/6	—	0 12 6	100,007	Queensland ...	9, Tokenhouse Yard.
Craven's Cal. ... G	4/- 4/6	4/-	0 6	-/3 June '94	0 4 8	100,000	Queensland...	30-1, S Swithin's-le.
Croydon King B. G	— —	—	0 5	—	0 5 0	60,000	N Queensland	Leadenhall Big. E.C.
Cumbrind (New)G	1/3 1/9	1/3	1 0	2/6 Dec. '87	1 0 0	184,'90	Queensland ..	Blomfield House E.C
DayDawn B.&W.G	6/6 7/-	6/6	1 0	-/6 Mar. '93	1 0 0	498,400	Queensland ..	3-5, Gracechurch-st.
Day Dawn P. C G	3/6 4/-	3/6	1 0	-/6 Apr. '92	1 0 0	490,000	Queensland ..	Winchester Ho., E.C
Eaglehawk.....G	1/6 2/-	1/-	1 0	—	0 19 6	120,000	Victoria..... ..	31, Lombard-street.
Eng. & Aus. Con. Cs	⅛	⅛	2 0	2½ 1883	1 17 6	70,000	So. Australia	136, Palmerston-bldg
Eng. & Aus 6% Deb.	— —	—	50 0	6% July, '94	50 0 0	700	So. Australia	136, Palmerston-bldg
Etheridge C	— —	—	0 5	—	0 5 0	324,790	Queensland ..	6-7 Queen-street-pl.
Frederick the Gt G	— —	—	1 0	—	1 0 0	125,000	Victoria.....	St. George's House.
Glenrock ..... G	1/- 1/6	1/-	1 0	—	0 19 6	225,000	N. Zealand ..	3-5, Queen-st., E.C.
Great Boulder .. G	par. ½ pm.	pr.½pm	1 0	—	0 10 0	100,000	W. Australia...	3, Gracechurch st.
Golden Gate..... G	1/6 2/-	1/6	0 10	—	0 10 0	150,000	Queensland..	9, Tokenhouse Yard.
Harrietville .....G	— —	—	1 0	-/6 July, '90	1 0 0	146,330	Victoria.....	6-7, Queen-street-pl.
Kaboonga .....G	-/3 1/3	-/3	0 10	—	0 10 0	200,000	Queensland ..	70 71, Bishopsgate st.
Kangarilla ..... S	2/6 3/-	2/3	1 0	—	1 0 0	83,275	So. Australia	68, Coleman-street.
Kapanga.....G	3/3 3/9	3/6	1 0	-/6 Jan. '91	0 19 0	250,000	N Zealand ..	9, New Broad-street.
Kilkivan.....G	1/6 2/-	1/6	1 0	—	1 0 0	81,392	Queensland ..	4, Coleman-street.
Midas G. F. .. G	— —	—	1 0	—	1 0 0	180,000	Victoria.....	32 Poultry, E.C.
Mills' Day Dawn G	1¾ 1⅜	1¾	1 0	-/6 Sept, '54	0 15 9	300,000	Queensland ..	3, Gracechurch-st.
Moruya ..... GS	— —	—	1 0	—	1 0 0	59,235	N. S. Wales ..	16, St. Helen's-place.
Mosman ..... G	1/6 2/-	1/6	1 0	-/3 Jan., '94	1 0 0	185,000	Queensland ..	3-5, Gracechurch-st.
Mt. Leyshon ..... G	-/6 1/-	-/6	1 0	-/6 Dec. '90	1 0 0	157,989	Queensland ..	7, Draper's-gardens.
Mountain Maid C	2/- 3/-	2/-	0 10	—	0 6 3	56,000	Queensland...	Leadenhall Bldgs.
Mount Morgan G	2⅛ 2⅝ xd	2⅛	1 0	-/6 Sept. '94	0 17 6	1,000,000	Queensland ..	50, Lime-street.
Mt. Shamrock GR	— —	—	1 0	—	1 0 0	275,000	Queensland ..	9, Tokenhouse-yard.
Mount Zeehan AT.	-/6 1/-	-/6	1 0	—	1 0 0	193,257	Tasmania	Mansion Ho. Cham.
N. Smithfield .. G	— —	—	0 10	3/- July, '94	0 10 0	48,000	Gympie.....	Queensland.
New Queen ..... G	5/8 6/-	5/8	1 0	-/6 Apr., '94	0 19 6	188,915	Queensland ...	30, St. Swithin's-la.
No. 7 N. E. Queen	-/6 1/-	-/6	2 10	-/3 Sept, '92	0 8 9	96,000	Queensland ...	30, St Swithin's-la,
PhœnixGold.PileG	— —	—	0 5	-/9 Aug. '94	0 5 0	48,000	Gympie.....	Gympie, Queensland
Port Phillip ...G	— —	—	0 5	—	0 5 0	200,000	Victoria	57, Moorgate-st., E.C.
Queen's Bthdy Un	— —	—	1 0	—	0 12 6	75,000	Victoria	7-8, St. Winchester St.
Queens. Smelting	⅛ ⅛	⅛	0	—	1 0 0	36,244	Queensland ..	9, Tokenhouse Yard.
Scottish Australian	¾ 1	¾	1 0	4 4-5d. May, '94	1 0 0	200,00	N.S. Wales ..	Winchester Ho. E.C.
Sunburst..... .....G	— —	—	0 10	-/6 Mar. '92	0 10 0	150,000	Queensland ..	9, Tokenhouse Yard.
Tasmanian Crown	— —	—	1 0	—	1 0 0	125,990	Tasmania	8, Old Jewry, E.C.
Tipperary ..... G	— —	—	1 0	—	1 0 0	35,000	N. Zealand ...	3-5, Queen-st., E.C.
True Blue .....G	— —	—	1 0	-/3 July, '94	1 0 0	53,000	Australia	Leadenhall Big. E.C.
Victoria Associatn.	— —	—	1 0	-/3 Sept. '94	1 0 0	144,000	Char. Towers	6, Crosby-square
Victory..... G	4/8 5/6	5/-	0 5	-/6 Mar., '94	0 5 0	200,000	Queensland ...	34, Gresham-st., E.C
Waihi..... G	2¾ 2¾	2¾	1 0	1/- June '94	1 0 0	150,000	New Zealand	11, Abchurch-la E.C
Wentworth Ord.G	5/- 6/-	5/-	1 0	—	1 0 0	350,000	N. S. Wales ..	4-6, Throgmort. Av.
West. Priority...G	13/- 15/-	14/-	1 0	6/- Jan. '93	1 0 0	150,000	N. S. Wales ..	4 6, Throgmort. Av.
W. Argentine ... G	-/9 1/3	-/9	1 0	—	0 19 6	150,000	N. Zealand ...	3-5, Queen-street,
W. Aust. Consgen	1¾ 1⅞	1⅝	1 0	—	1 0 0	25,000	W. Australia...	33, Old Broad st., EC
W.Australian G P	2⅝ 3⅛	3¼	1 0	—	1 0 0	} 65,000	W. Australia...	28-29, S. Swithin's-la.
W.Australian G.F.	— —	—	1 0	—	0 10		W. Australia...	28-29, S Swithin's-la
Zeehan Montana S	— —	—	1 0	8d Aug., 94	1 0 0	66,000	Tasmania	11, Queen Victoria st
Zeehan Montana S	— —	—	1 0	5d Aug., 94	0 12 6	12,800	Tasmania	11, Queen Victoria st

EUROPEAN MINES.

Alamillos L	10/- 15/- xd	10/-	2 0	-/6 Sept. '94	2 0 0	35,000	Spain	6, Queen-street-place
Avala .....Q	0 ⅜	0	1 0	1/- May '93	1 0 0	160,047	Servia.....	4, Tokenho. Bldgs.
Consett Ore I	5¾	5¾	1 0	5/- July '94	1 0 0	55,200	Spain	19, Grey-st., N'castle
English Cr. Spelter	⅜ ⅝	⅜	1 0	2½ % Aug. '94	1 0 0	84,000	Lombardy	9, Queen-street-place
Fortuna L	15/- 20/- xd	15/-	2 0	1/- Sept. '94	1 0 0	25,000	Spain	8, Queen-street-place
Libiola.....C	3¼ 3¾ xd	3¼	5 0	2/6 Aug. 94	5 0 0	60,000	Italy	Dashwood Ho., E.C.
Linares L	3¼ 3¾ xd	3¼	3 0	5/- Sept, '94	3 0 0	14,998	Spain	8, Queen-street-place
Mason & Barry...C	2⅝ 3⅛	2⅝	5 0	2/- May. '94	5 0 0	185,172	Portugal	87, Cannon-street.
Oscar .....G	— —	—	5 0	—	0 4 6	117,240	Norway	4a, Austin Friars.
Pestarena .....G	3/8 4/-	4/3	3 0	—	1 0 0	67,188	Italy	6-7, Queen-street-pl.
Pontgibaud.....L	— —	—	20 0	11/5 Dec. '93	20 0 0	14,000	France	6-7, Queen-street-pl.
Rio Tinto C	15⅝ 15¾	15⅝	10 0	?/- May, '94	10 0 0	325,000	Spain	30, St. Swithin's-lane
Do. (Mort. Bonds)	104 106	104	100 0	5% July, '94	100 0 0	£1892,740	Spain	30, St. Swithin's-lane
Do. (2nd do.)	102 104	102	100 0	5% July, '94	100 0 0	£1024,600	Spain	30, St. Swithin's-lane
Do. (3rd do.)	100 102	100	100 0	5 p.c. July, '94	100 0 0	£587,000	Spain	30, St. Swithin's lane
Ripanji .....AQ	12/- 14/-	12/-	1 0	—	0 19 0	95,000	Servia.....	120, Bishopsgt-st, Wn.
Tharsis.....C Sul	5 5¼	5	2 0	12½ % Mar. '94	2 0 0	625,000	Spain	Glasgow.
West Prus Pre.pref	— —	—	10 0	5% June '94	10 0 0	365	Germany	Walbrook Ho., E.C.
West Prussian Pre.	— —	—	10 0	5% June, '94	10 0 0	5,480	Germany	Walbrook Ho., E.C.
West russian Or.	— —	—	10 0	5% June, '94	10 0 0	14,600	Germany	Walbrook Ho., E.C.
Wohlfahrt L	— —	—	1 0	3% June, '94	1 0 0	99,834	Prussi	17, Victoria-st., S.W.
Wohlfahrt	— —	—	1 0	3% June, '94	0 18 0	9,999	Prussia	17, Victoria-st., S.W.

INDIAN AND ASIATIC MINES.

Name.	Closing Price, Sept. 28, 1894	Closing Price, Sept 21, 1894.	Par.	Latest Dividend.	Called up per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Asia Minor Pref. St.	—	—	0 10	—	0 10 0	42,430	Asia Minor ...	2, Metal Ex Bldgs.
Do. Ord. ...	—	—	0 10	—	0 2 0	51,584	Asia Minor ..	2, Metal Ex. Bldgs.
Burmah Ruby .....R	6/8 7/6	7/-	1 0	—	0 18 0	180,000	India	6-7, Queen-street-pl.
Burma Ruby .....R	4/- 5/	4/-	1 0	—	0 17 0	300,000	Burmah	Suffolk House, E.C.
Champion Reef...G	3 11/16 3 13/16 xd	3 11/16	1 0	2/- Aug. '94	1 0 0	200,000	India	6-7, Queen-street-pl.
Cotar Central G	-/7½ -/10½	-/7½	1 0	—	1 0 0	200,000	India	Dashwood Ho., E.C.
Coromandel..... G	1/2 2/6	1/6	1 0	—	0 12 6	95,000	India	6-7, Queen-st.-place.
De Ale Moyar ...G	— —	—	1 0	—	1 0 0	200,000	India	34, Nicholas-lane.
Gemring&Mining	— —	—	2 0	—	1 7 6	19,594	Ceylon	183, Gresham House.
Gold Fids Mysore G	20/- 22/-	21/-	1 0	1/- July '92	1 0 0	220,000	India	6-7, Queen-street pl.
Gold Fids Si m G	— —	—	1 0	—	1 0 0	150,000	Siam	19, St. Swithin's-lane.
...derabad Dec...	— —	—	10	—	10 0 0	115,000	Deccan	16, St. Helen's-place.
Kempinkote GdFd	3/9 4/3	3/9	0 5	—	0 3 6	665,473	India	6-7, Queen-st.-place.
...sore ..... G	2 11/16 2 13/16	2 13/16	1 0	2/- July, '94	1 0 0	250,000	India	6-7 Queen-street pl.
My. Barnhalli .. G	1/9 2/3	2/-	1 0	—	0 12 0	100,000	India	2, East India Avenue
Mysore Reefs ...G	8/6 9/6	9/	1 0	—	1 0 0	134,788	India	6-7, Queen-street-pl.
Mysore West(N)G	9/6 10/-	8/-	1 0	—	0 18 0	127 ,68	India	Dashwood Ho., E.C.
Mysore Wynaad G	8/6 9/6	8/-	1 0	—	0 18 0	250,000	India	ashwood Ho., E.C.
Nine Reefs .....G	3/6 4/-	3/6	0 10	—	0 10 0	50,000	India	6-7, Queen-street-pl.
Nine Reefs	3/- 3/6	3/9	0 10	—	0 9 6	200,000	India	6-7, Queen-street-pl.
Nundydrong..... G	1¾ 1¾	1¾	1 0	1/- Mar. '94	1 0 0	200,000	India	6-7, Queen-street-pl.
Ooregum (Dt.O. G	3¾ 3⅞	3 15/16	1 0	4/6 July, '94	1 0 0	145,000	India	6-7, Queen-street-pl.
Do. (10% Pref.).	3⅞ 4⅛	3⅞	1 0	4/- July, '94	1 0 0	95,536	India	6-7, Queen-street-pl.
Do. (10% Pref.).	3 3¼	3	1 0	4/- July '94	0 5 0	24,464	India	6-7, Queen-street-pl.
Sahang Consol.. T	8/- 9/-	7/-	1 0	15% Apr. '89	1 0 0	200,000	Malay Penin.	Blomfield Ho., E.C.
Sahang Kahang T	1/16 3/16	1/16	1 0	—	1 0 0	394,700	Malay Penin.	4a, Jeffrey's sq., E.C.
South E. Mysore..	3.9 4/3	4/3	0 4	—	0 4 0	134,623	India	6-7, Queen-street-pl.

NORTH AMERICAN MINES.

Alaska Mexican...G	—	—	$5	—	$5	160,000	Alaska.....	30, St. Swithin's-la.
Alaska Treadwell G	3¾ 4	3¾	$25	1/6 July, '94	$25	200,000	Alaska.....	30, St. Swithin's-la.
Almeda and T .. S	-/3 -/9	-/3	2/6	—	0 2 6	351,008	Mexico	6, Queen-street-place
American Belle...S	1/9 2/3	2/-	1 0	-/6 Mar. '91	1 0 0	398,890	Colorado	25A, Old Broad-street
Anglo Mexican ...S	— —	—	5 0	3/- Jan. '90	5 0 0	74,850	Mexico	23, College Hill.
Arizona (Pref) Cu	9/9 10/3	10/-	4 0	—	4 0 0	158,920	Arizona	74, Geo.-st., Edinbor'
Do. 10% Deben.	59	59	100 0	7% May '94	100 0 0	2,660	Arizona...	74, Geo.-st., Edinbor'
Big Creek ..... Ay.	—	—	1 0	1/- Dec. '91	1 0 0	50,000	Nevada	2, Pancras-lane, E.C.
California ..... G	—	—	0 10	-/6 May '90	0 8 9	129,571	Colorado	St. George's Ho. E.C.
Canadian Phos. r	—	—	1 0	-/6 Nov. '90	1 0 0	73,334	Canada	155, Fenchurch-st.
Colorado Boy... S	—	—	1 0	—	1 0 0	112,491	Colorado	Abchurch-chbrs. E.C
Cortez ..... S	—	—	1 0	3% Feb. '93	1 0 0	300,000	Nevada	Suffolk House, E.C.
Decatur.....SI.	—	—	1 0	—	1 0 0	32,500	Colorado	35, Queen Victoria-st.
Do... ..... (Pref.)	—	—	1 0	—	1 0 0	12,500	Colorado	35, Queen Victoria-st
De Lamar.. .....GS	18/6 19/6	18/-	1 0	1/- June '94	1 0 0	400,000	Idaho.....	6, Draper's-gardens.
Dickens Custer GS	-/3 -/6	-/3	1 0	—	0 19 9	420,000	Idaho....	Winchester Ho. E.C.
Elkhorn .....S	13/- 14/-	14/-	1 0	1/- Sept. '94	1 0 0	175,007	Montana	6, Draper's-gardens.
Emma .....S	-/3 -/6	-/2	0 5	—	0 5 0	403,618	Utah	15, Geo-st, Mansn. Ho
Flagstaff .....S	— —	—	1 0	—	0 18 3	240,000	Utah	Dashwood Ho., E.C
Fisk..... G	— —	—	1 0	6d May, 94	1 0 0	134,000	Colorado	5, Fenchurch st.
Garfield ..... GS	— —	—	1 0	-/6 Dec. '88	0 19 6	98,185	Nevada	Suffolk House, E.C.
Golden Feather G	8/- 9/-	8/6	1 0	—	1 0 0	180,000	California ...	8, Stephens Cs E.C.
Golden Gate ..... G	4/- 5/-	4/6	1 0	—	0 19 6	79,600	California ...	8t. Stephens Cs E.C.
Golden Leaf..... G	4/3 4/9	3/-	1 0	—	1 0 0	300,259	Montana	3, Draper's Gardens.
Golden Valley....G	— —	—	1 0	—	1 0 0	55,507	Colorado	15, Angel Court.
Harqua hala..... G	5/6 6/6 xd	5/6	1 0	-/3 June '94	0 6	300,000	Arizona	6, Draper's Gardens.
Ho'comb Valley G	-/9 1/-	-/6	0 5	—	0 5 0	540,000	California ...	14, Cornhill. E.C.
Idaho..... .....GS	1/9 2/3	1/9	0 5	—	0 4 8	143,439	Idaho	140, Fe denhall-st.
Jackson Goldfields	-/6 1/-	-/6	0 5	—	0 5 0	408,635	California	11, Poultry, E.C.
Jay Hawk ..... G	5/- 6/-	5/6	1 0	-/6 Dec. '92	1 0 0	285,000	Montana	Dashwood House,
Lehmont'r "B"GS	— —	—	1 0	-/6 June. '91	1 0 0	112,901	Colorado	Blomfield Ho., E.C.
La Plata..... .....SC	-/3 -/6	-/3	0 5	1/3 Oct. '92	0 4 3	405,000	Colorado	11, Poultry, E.C,
La Veres .....GS	— —	—	1 0	—	0 18 0	76 015	Mexico	20, Bucklersbury, EC
Maid of Erin ..... S	— —	—	1 0	4c. p.sh Sept '94	1 0 0	575,000	Colorado	43, Threadneedle-st.
Mammoth Gold ...	-/3 -/6	-/3	1 0	—	1 0 0	400,000	Pinal Arizona.	257, Winchester Ho.
Mesq. d'l Oro (P) G	— —	—	5 0	—	5 0 0	10,000	Mexico	Dashwood Ho., E.C.
Mesq. d'l Oro (D) G	— —	—	5 0	—	5 0 0	10,000	Mexico	Dashwood Ho., E.C.
Montana ..... GS	15/6 16/6	11/6	1 0	5% April '91	0 19 0	657,158	Montana	Gresham House, E.C.
New Colorado ...S	— —	—	1 0	—	0 17 0	65,000	Colorado	Abchurch Chan. E.C
New Consolidated SC	— —	—	0 5	—	0 3 6	248,576	Nevada	15, Angel-court, E.C
N. Gold Hill.....G	-/2 -/4	-/2	1 0	—	0 19 9	191,045	N. Carolina ...	15, George-st., E.C.
New Guston .....S	11/3 12/9	12/6	1 0	1/- Oct. '92	1 0 0	110,000	Colorado	25A, Old Broad-st.
New Hoover Hill G	— —	—	0 10	-/9 Dec. '88	0 10 0	120,000	N. Carolina ...	Langthorne Ho., E.C
New London ..... G	— —	—	2/6	—	0 2 6	327,816	New Carolina	55, Bishopsgt.-st. Wn
Palmarejo .... GS	1/- 1/6	1/3	1 0	—	1 0 0	418,888	Mexico	4, Copthall-buildings
Pinos Altos(D)GS	5/- 6/-	6/-	1 0	-/6 Mar.' 90	1 0 0	100,000	Mexico	110, Cannon-street.
Do. 15% Cum Pref	— —	—	1 0	—	1 0 0	60,000	Mexico	110, Cannon street.
Pittsby Con. (N) G	— —	—	1 0	1/6 Mar. '88	1 0 0	77,147	Nevada	Suffolk House, E.C
Poorman Con. GS	2/- 2/6	2/3	0 8	—	0 8 0	273,948	Idaho	5, Copthall-bigs. E.C
Red Mountain ...S	— —	—	1 0	—	1 0 0	48,686	Colorado	11, Poultry, E.C.
Richmond ...GSL	7/6 10/-	7/

"THE MINING JOURNAL" SHARE LIST—(Continued).

SOUTH AND CENTRAL AMERICAN MINES—(Continued).

Name.	Closing Price, Sept.28,1894	Closing Price, Sept.21, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Santa Barbara ...G	—	—	0 10	1/3 Dec. '86	0 10 0	60,000	Brazil.....	Liverpool
Santa Elena ..... N	1½ 1¾	1½	5 0	5/- Nov. '93	5 0 0	22,000	Tarapaca	3, Gracechurch-st.
Santa Rita .....N	4¼ 4½	4¾	5 0	15% Apr., '94	5 0 0	20,000	Chili	DashwoodHouse,E.C
San Sebastian ..N	2¼ 2½	2½	5 0	1/8 May '94	5 0 0	29,000	Chili	DashwoodHouse,E.C
Segovia .....G	—	—	5 0	—	0 4 0	160,000	Colombia	5, Copthall-buildings
Sucre Pref.....G	—	—	1 0	10% July '94	0 15 0	840	Colombia	23, St. Swithin's ln.
Sucre Ord.....G	—	—	1 0	8% July '94	1 0 0	10,000	Colombia	23, St. Swithin's ln.
Tetuan .....G	—	—	1 0	—	0 19 6	200,000	Colombia	5, Copthall-buildings
Tolima "A" .....S	8¼ 8¾xd	8¾	5 0	10% Aug. '94	5 0 0	14,000	Colombia	18, Finsbury-circus.
Do. "B" .....S	7¼ 7¾xd	7	5 0	10% Aug. '94	5 0 0	6,00.	Colombia	18, Finsbury-circus.
Vic. & Altamira ...	—	—	0 5	—	0 5 0	200,000	Venezuela ...	Broad-st. Avenue.
West Indian.....G	—	—	0 5	—	0 5 0	700,000	San Domingo	49, Queen Victoria-st.
Zaruma .....G	—	—	0 5	—	0 5 0	261,422	Ecuador..... ..	1, Gt. Winchester-st.

AFRICAN MINES.

Name.	Closing Price, Sept.28,1894	Closing Price, Sept.21, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Afrikander ..... G	1⅝ 1¹⁵⁄₁₆	1¾	1 0	—	1 0 0	40,000	Transvaal	19, St. Swithin's-lane
Agnes Block..... G	10/- 12/-	10/-	1 0	—	1 0 0	78,507	Transvaal	54, Old Broad-street.
Alexandra Estate G	5/8 6/8	5/8	1 0	—	1 0 0	225,000	Witwatersrd.	Warnford Court, EC
Appantoo..... G	—	—	1 0	—	1 0 0	71,000	West Coast ...	9, New Broad-street.
Aurora ..... G	6/6 7/6	5/-	1 0	5% Mar, '93	1 0 0	65,000	Witwatersrd.	8, Old Jewry.
Aurora West..New G	4/- 6/-	4/-	1 0	5% Mar., '93	—	80,000	Witwatersrd.	1, Crosby Square.
Balkis Eersteling G	/7½ -/10½	-/7⅛	0 10	—	0 9 6	520,000	Transvaal	85, Gracechurch-st,
Balkis Laud	1/9 2/3	1/9	0 10	—	0 10 0	520,000	Transvaal	85, Gracechurch-st.
Banket..... G	-/9 1/3	-/9	1 0	—	1 0 0	200,000	Witwatersrd.	Johannesburg.
Bantjes Reef .....G	13/- 14/-	12/6	1 0	—	1 0 0	83,000	Witwatersrd.	Warnford-court.
Barrett..... G	2/9 3/3	3/-	0 10	—	0 9 0	207,495	De Kaap	17, Basinghall-street
Bechuanaland Exp.	24/8 25/8	25/8	1 0	—	1 0 0	200,00	Bechuanaland	19, St. Swithin's-lane
Block "B" Lang.	7/- 8/-	7/-	1 0	—	1 0 0	535,000	Witwatersrd.	8, Prince-s-st., E.C.
Booysen Land .G	7/- 9/-	7/-	1 0	—	0 11 0	95,000	Transvaal.....	8, Princes st., E.C.
Do. Pref.....	-- --	—	1 0	8% Mar., 94	0 10 0	71,174	Transvaal.....	4 Tokenhouse-bldg.
Brit. S. A. Char. ...	36/9 37/3	36/9	1 0	—	1 0 0	2,000,000	S. Africa	19, St. Swithin's-lane
Buffelsdoorn..... G	28/- 30/-	26/-	1 0	—	1 0 0	250,000	Potchefstroom	8, Old Jewry.
Buluwayo 8ynd. ...	1 1¼pm	1	1 0	—	1 0 0	12,000	Matabeleland	10, Helen's Place.
Cape Copper C	1¼ 1⅝	1⅝	2 0	1/3 June '94	2 0 0	300,000	Cape Colony	9, Queen-street-place.
Do. 6 % Pref. ..	1⅞ 2⅛	2	2 0	1/3 June '94	2 0 0	45,000	Cape Colony	9 Queen-street-place.
Cen. Montrose... G	1/- 2/-	1/-	1 0	—	0 18 6	69,000	Transvaal ...	15, George st. Mn. Ho.
Champ d'Or..... G	2⅛ 2¹¹⁄₁₆	2⅜	1 0	—	1 0 0	116,016	Witwatersrd.	8, Old Jewry, E.C.
Champ d'Or Deep G	13/6 14/6	13/8	1 0	—	1 0 0	275,000	Witwatersrd.	Fox st., Johannesbrg
City and Suburb. G	15¾ 16	15⅝	1 0	25% Mar. '94	1 0 0	75,000	Witwatersrd.	1, Crosby Square.
Coetzeestroom ...G	1/- 2/-	1/-	0 5	—	0 5 0	140,000	De Kaap	105, Leadenhall-street
Con. Buitfontein D	26/6 27/6	26/6	1 0	5% Nov. '89	1 0 0	721,500	Griqualand W	62, Lombard-st.
Con. Deep Levels G	2¼ 2⅝	2	1 0	4/- June '94.	1 0 0	187,250	Transvaal	30, St. Swithin's-lane.
Con. G. Fields S A	2¼ 2⅜	2⅜	1 0	10% Nov. '93	1 0 0	1,250,00	S. Africa	8 Old Jewry.
Do. 5½% Deben..	103 104	101½	5 0	5½ July, '94	5 0 0	670,000	S. Africa	8, Old Jewry.
Crown Reef .....G	8¼ 8½	8⅜	1 0	25% May '94	1 0 0	120,000	Witwatersrd.	120, Bishopsgt st Wn
De Beers Consol. D	16¾ 17	16¼	5 0	12/6 June '94	5 0 0	789,791	Transvaal	62, Lombard-street.
Do. 5½% 1st Deb..	103½ 104½	103¼	100 0	5½% Feb. '94	5 0 0	£1,875000	Transvaal	62, Lombard-street.
Do. 5½% Bul. Ob.	104⅛ 105½	104½	100 0	5½% Apr. '94	5 0 0	£720,100	Transvaal	62, Lombard-street.
Durban Roodept. G	5⅞ 6⅛	6	1 0	3/- Sept. '94	1 0 0	£125,000	Witwatersrd.	28, Leadenhall-bldgs
East Rand..... G	13/8 14/8	13/6	1 0	—	1 0 0	570,000	Witwatersrd.	170, Winchester-ho.
Evelyn ..... G	— —	—	1 0	10% Jan. '89	1 0 0	66,000	Witwatersrd.	28, Old Jewry, E.C
Exploration	1⅝ 1⅜	1⅝	1 0	1/- Dec. '93	0 4 0	140,000	S. Africa	30, S. Swithin's-ln.
Exploring Co.	4¾ 5	4⅝	1 0	25/- Feb. '94	1 0 0	69,350	S. Africa	19, S. Swithin's-ln.
Ferreira .....G	8⅝ 8⅞	8⅝	1 0	100% June '94	1 0 0	45,000	Witwatersrd.	120, Bishopsgt st. Wn
Forbes Reef (Nw) G	3/- 5/-	3/-	1 0	—	0 19 0	105,000	De Kaap	45-6, Leadenhall-st.
Geldenhuis Deep G	4 4¼	4	1 0	—	1 0 0	265,000	Transvaal	30, St. Swithin's-lane.
Geldenhuis Est. G	5⅝ 5¾	5⅝	1 0	20% Mar. '94	1 0 0	187,500	Witwatersrd.	120, Bishopsgt st. Wn
Do. Main Reef	13/- 14/-	12/6	1 0	—	1 0 0	150,000	Witwatersrd.	Warnford-court, E.C.
George and May G	17/6 20/-	17/8	1 0	—	—	112,750	Witwatersrd.	Warnford Court, E.C
George Goch ... G	— —	—	1 0	—	1 0 0	100,000	Witwatersrd.	Johannesburg
Glencairn ..... G	34/- 35/-	34/-	1 0	5 p c Aug. 94	1 0 0	200,000	Witwatersrd.	2, Drapers-gardens.
Gold Estates T... G	3/6 4/6	3/6	1 0	15% Dec. '89	0 10 0	130,000	Transvaal ...	46, Queen Victoria-st
Gld. Fls. Deep...G	1¹⁵⁄₁₆ 1¾	1¹⁵⁄₁₆	1 0	—	1 0 0	600,000	S. Africa	8, Old Jewry.
G. F. of Mashonld.	11/3 13/9	13/9	1 0	—	1 0 0	200,000	Mashonaland	19, St. Swithin's ln.
G.F.Nerrad' Fuego	2/9 3/-	2/9	0 4	—	0 4 0	400,000	Mosambique...	2, Tokenhouse Bldgs.
Grahamstown . G	11/6 12/6	10/6	1 0	—	1 0 0	150,000	Witwatersrd.	14, Throgm rton-st.
Graskop ..... G	1/6 2/-	1/9	0 5	2½% Mar. '92.	0 5 0	500,000	Lydenburg ...	85, Gracechurch-st.
Griqualand W.....D	6¾ 7	6⅞	10 0	4% March '94	10 0 0	105,700	Transvaal	62, Lombard-street
Henry Nourse ...G	3¹¹⁄₁₆ 3¹³⁄₁₆	3¾	1 0	—	1 0 0	100,000	De Kaap	Warnford-court.
Joe's Reef ..... G	4/6 5/-	4/-	1 0	—	1 0 0	57,404	De Kaap	21, Mincing Lane.
Johannesburg Pnr	3¾ 4	3⅞	1 0	12½% Nov.,'93	1 0 0	2,000	Witwatersrd.	Johannesburg.
Jubilee ..... G	5⅞ 6¼	6⅛	1 0	30% Aug. '94	1 0 0	30,000	Witwatersrd.	8, Old Jewry.†
Jumpers .....G	4⅜ 4⅝	4⅛	1 0	30% June '94	1 0 0	100,000	Witwatersrd.	120, Bishopsgt st. Wn
Kimberley .. ..D	par 8 pm	⅛	1 0	—	0 10 0	98,672	Kimberley ...	19, Finsbury circus.
Kimberley Rdpt....	8/6 9/6	10/-	1 0	—	1 0 0	125,000	Kimberley ...	2, Drapers-gardens.
Kleinfontein (N) G	1¹⁵⁄₁₆ 2	1¾	1 0	—	1 0 0	150,000	Witwatersrd.	8, Old Jewry.
Klerksdorp ..... G	1/9 2/3	1/3	1 0	—	1 0 0	140,007	Transvaal	110, Cannon-street.
Koffyfontein.....D	1¹⁵⁄₁₆ 1¹⁵⁄₁₆	1¹⁵⁄₁₆	1 0	—	0 5 0	50,000	Jacobsdaal ...	4, Bishopsgate street

AFRICAN MINES—(Continued).

Name.	Closing Price, Sept.28,1894	Closing Price, Sept. 21, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
Langlaagte Est. G	4⅛ 4⅜	4¼	3 0	12½% June '94	1 0 0	467,000	Witwatersrd.	59, Holborn Viaduct.
Do. Royal	3¼ 3⅜	3⅜	1 0	5% Sept. '93	1 0 0	100,000	Witwatersrd.	2, Drapers-gardens.
Lisbon-Berlyn .. G	2/3 2/9	2/6	2/6	—	0 2 6	883,233	Lydenburg ...	110, Cannon-street.
London & S. A. Ex.	10¼ 10¾xd	10¾	0 10	2/6 Sept. '94	0 10 0	100,000	S. Africa	19, Finsbury-circus.
Luipaards Vlei Est.	8/- 9/-	8/-	1 0	6% Mar, '90	1 0 0	319,093	Witwatersrd.	Warnford-court.
Do. do. do.	⅛ ¼	⅛	1 0	—	0 10 0	25,000	Witwatersrd.	8, Old Jewry.
Main Reef (New) G	8/- 10/-	8/-	1 0	—	0 10 0	300,000	Witwatersrd.	8, Old Jewry.
May Con. (New) G	1 1⅛	1¹⁄₁₆	1 0	—	1 0 0	430,000	Witwatersrd.	4, Lothbury.
Mashon. Agency...	1⅛ 1¼	⅛	1 0	—	0 10 0	100,000	Mashonaland	8, Old Jewry, E.C.
Mashon. Central...	— —	—	1 0	—	1 0 0	200,000	Mashonaland	8, Old Jewry, E.C.
Matabeleland	— —	—	12/6	—	0 12 6	79,889	Matabeleland	73, Basinghall St, E.C.
Metropolitan (N) G	17/6 20/-	17/6	1 0	—	1 0 0	75,000	Witwatersrd.	1, Crosby Square.
Meyer & Charl....G	6 6¼	5⅞	1 0	25% June '94	1 0 0	71,687	Witwatersrd.	Warnford-court.
Mines Trust	⅝ ¾	⅝	1 0	3% May '94	1 0 0	82,774	So. Africa	130, Winchester Ho.
Modderfontein . G	1⅝ 1⅞	1⅝	1 0	—	1 0 0	200,000	Witwatersrd.	Warnford-court.
Montrose..... G	⅝ ¾	⅝	1 0	3/- Feb. '90	1 0 0	70,000	De Kaap	65, New Broad-street
Moodies G.&E....G	10/- 11/-	9/6	1 0	-/4 May '90	1 0 0	240,000	De Kaap	8, Old Jewry.
Mozambique.....	13/9 16/3	13/9	1 0	—	1 0 0	400,000	S. E. Africa ...	Broad-street House.
Namaqua C	18/9 21/3	18/9	2 0	2/6 July '91	2 0 0	194,331	Namaqualand.	34, Leadenhall-bldg.
New Black Reef ...	— —	—	1 0	—	1 0 0	76,000	Witwatersrd.	9, King William st.
New Chimes..... G	2¹⁵⁄₁₆ 2¹⁵⁄₁₆	2	1 0	10% June, '94	1 0 0	70,000	Witwatersrd.	8, Old Jewry, E.C.
New Clewer Estate	⅞ 1	⅞	1 0	—	1 0 0	100,000	Lydenburg ...	120, Bishopsgt st. Wn
New Croesus..... G	1¹⁵⁄₁₆ 1¹⁵⁄₁₆	1¹⁵⁄₁₆	1 0	5 % Aug. '92	1 0 0	195,000	Langlaagte ...	4, Bishopsgt.-st. Wt.
New Edwin Brav	— —	—	7 0	—	7 0 0	65,000	De Kaap	23, College Hill
New Gordon.... D	2/- 3/-	2/-	1 0	5% Dec. '89	1 0 0	560,250	Griqualand ...	110, Cannon-street.
New Heriot .....G	5⅜ 5⅝	5⅜	1 0	20 p c Sept. 94	1 0 0	195,000	Witwatersrd.	1, Crosby Square.
New Jagersf. ...D	14 14¼ xd	14⅜	10 0	5% Sept., '94	10 0 0	100,000	Transvaal	5, Copthall-buildings
New LouisD'Or..G	6/9 7/-	7/6	1 0	—	1 0 0	100,000	Witwatersrd.	53, New Broad-street
New Primrose ...G	4⅜ 4⅝	4½	1 0	20% July '94	1 0 0	230,000	Witwatersrd.	2, Draper's-gardens.
New Rietfontein G	2 2¼	1¾	1 0	—	1 0 0	160,000	Witwatersrd	Warnford-ct., E.C.
NewS.Augustine D	-/7⅛ -/10½	-/7½	1 0	—	0 19 0	234,583	Griqualand W	30-1, St. Swithin's-ln
New Salisbury ...G	2¾ 2⅞	2¾	0 10	—	1 0 0	93,000	Witwatersrd.	1, Crosby-square.
New Spes Bona ..	7/6 8/6	7/6	1 0	—	1 0 0	113,801	Witwatersrd	24, N. John-st., Upl.
N. Ophir Concess.	1/- 1/8	-/6	1 0	—	0 18 6	111,857	E. Coast Africa	31, Lombard-street.
New Virginia ...G	3/9 4/3	3/9	0 10	—	0 10 0	48,335	Transvaal	26, Budge-row, E.C.
Nigel ..... G	3¹¹⁄₁₆ 3¹³⁄₁₆	3¾	1 0	15% Sept. '94	1 0 0	160,000	Witwatersrd.	1, Crosby-square.
Nooitgedacht E. G	— —	—	1 0	—	1 0 0	160,000	Lydenburg ..	8, Old Jewry.
Oceana	1¹³⁄₁₆ 1¹⁵⁄₁₆	1¹³⁄₁₆	1 0	25/- Nov. '89	1 0 0	150,000	Transvaal	4, Sun Court, E.C.
Oceana Develpmnt	⅛ dis par	⅛dispar	1 0	—	0 5 0	50,000	Transvaal	4 Sun Court, E.C.
Orange F.S.E. ... D	4 4½	4	1 0	1/- Sept., '94	1 0 0	284,000	Orange F. State	10, Moorgate-street.
Orion ..... G	2⅞ 3⅛	2⅞	1 0	10% Aug. '94	1 0 0	30,000	Witwatersrd.	19, Basinghall-street
Otto's Kopje..... D	2/6 3/-	2/6	1 0	—	0 19 3	437,885	Kimberley ...	110, Cannon-st., E.C.
Paarl Central ... G	20/- 22/-	20/-	1 0	—	1 0 0	138,750	Transvaal	120, Bishopsgt st, Wn
Paarl Ophir ..... G	— —	—	1 0	10p.c. Aug. '94	1 0 0	12,000	Tweefontein	Cape Town.
Pardy's Mozambq.	— —	—	0 10	10p.c. Apr. 94	0 10 0	13,000	S. E. Africa ..	Broad St. Avenue.
Figgs Peak, New G	3/- 4/-	3/-	1	—	0 16 6	230,325	Swaziland	6, Queen-street-place
Potchefstoom ... G	2/- 3/-	2/-	1 0	—	1 0 0	161,000	Potchefstroom	19, Bury-st., E.C.
Princess Estate G	1 1¼	18/9	1 0	—	1 0 0	72,046	Witwatersrd.	33, Cornhill, E.C.
Randfontein .....G	14/- 15/-	14/-	1 0	—	1 0 0	1,916,500	Witwatersrd	59, Holborn Viaduct.
Rand Mines ..... G	11⅛ 11⅜	11	1 0	—	1 0 0	332,708	Witwatersrd.	120, Bishopsgt st. Wn
Read's Drift ..... D	16/- 18/-	16/-	1 0	—	—	50,000	Transvaal	19, Finsbury circus.
Robinson ..... G	6⅞ 7⅛	6¾	5 0	5% Aug. '94	5 0 0	543,750	Transvaal	56, Holborn Viaduct.
Roodepoort Un. G	3⅜ 3½	3⅜	1 0	10p.c. Aug. '94	1 0 0	100,000	Witwatersrd.	Warnford-court.
Sheba .....G	30/6 31/6 xd	28/6	1 0	1/- Sept. '94	1 0 0	614,450	Lydenburg ..	85, Gracechurch-st.
Silati .....G	2/6 3/-	2/6	1 0	—	0 17 6	625,000	Zoutpansberg	4, Sun Court, E.C.
Simmer & Jack...G	7⅞ 8¼	7¾	1 0	10% May '94	1 0 0	85,000	Witwatersrd.	33, Cornhill.
Do New	— —	—	6 0	—	6 0 0	45,000	Witwatersrd.	33, Cornhill.
S.A. Gold Trust ...	1⅜ 1⅝	1⅜	1 0	10% April '93	1 0 0	220,000	South Africa..	8, Old Jewry.
S.Simmer & Jack G	1½ 1⅝	1½	1 0	—	1 0 0	120,000	Witwatersrd	31, Lombard-st., E.C.
Spitzkop (New) G	11/- 12/-	12/-	1 0	—	0 19 6	99,070	Lydenburg ..	15, Bishopsgt-st. Wt.
Stanhope ..... G	1⅞ 2⅛	1¾	1 0	50% July. '94	—	34,000	Witwatersrd	5, Copthall buildings
Sutherland E. ...G	8/3 8/9	5/3	1 0	—	0 18 6	220,000	Zoutpansberg	8, Old Jewry.
Teutonia.....G	— —	—	1 0	—	1 0 0	96,000	Witwatersrd.	8, Old Jewry.
Thistle Reef ..... G	-/8 1/-	-/8	0 8	—	0 4 0	150,000	Barberton	15, Angel-court, E.C
Trans. Coal Trust...	14/- 15/-	12/6	1 0	1/- Sept. '94	1 0 0	439,965	Witwatersrd.	Broad-st. House, E.C
Trans. Est. & Dev.	8/6 9/6	9/6	1 0	—	1 0 0	285 700	Transvaal	78, Old Broad-st. E.C.
Trans. Gold .....G	2¾ 2¹¹⁄₁₆	2⁷⁄₁₆	1 0	1/- June '94	1 0 0	250,000	Transvaal	Suffolk House, E.C.
Trans. Land... ...	6/- 7/-	6/-	1 0	—	1 0 0	79,915	Transvaal	Suffolk House, E.C.
Trans. Land ..... G	2/- 3/-	2/-	1 0	—	0 15 0	169,993	Transvaal	33, Cornhill.
Treasury..... .....G	— —	—	1 0	7½% May '94	1 0 0	26,000	Witwatersrd.	Johannesburg.
Turffontein Est. ...	— —	—	1 0	2½ Jan. 94	1 0 0	40,007	So. Africa	130, Winchester Ho.
Un. Ivy Reef..... G	12/6 15/-	12/6	1 0	2½ Jan. '94	1 0 0	45,000	Transvaal	110, Cannon-street
Un. Langlaagte G	10/- 12/6	10/-	1 0	—	1 0 0	100,000	Witwatersrd	23, St. Swithin's-ln.
Van Ryn ..... G	1½ 1⅝	1½	1 0	—	1 0 0	99,810	Witwatersrd.	1, Crosby-square.
Victory Hill .....G	— —	—	1 0	—	1 0 0	108,000	De Kaap	Portland House, E.C.
Village Main Reef	3⅞ 4⅛	3⅞	1 0	—	1 0 0	132,000	Witwatersrd.	8, Old Jewry.
Wassau .....G	— —	—	1 0	—	1 0 0	100,000	Gold Coast	147, Cannon-street.
Wemmer ... ...G	4⅞ 5⅛	4⅞	1 0	10% Nov. '91	1 0 0	55,000	Witwatersrd	19, Bury-street.
Witwatersrand .....G	22/6 23/6	22/6	1 0	—	1 0 0	250,000	Witwatersrd	19, Bury-st., E.C.
Wolhuter .....G	3 3¼	3	1 0	—	1 0 0	120,000	Witwatersrd.	Warnford-court.
Wolverand.....G	⅛ ⅜	⅛	1 0	2/- Apr., '94	0 18 0	18,750	Transvaal	5, Copthall-buildings
Wolverand ..... G	— —	—	1 0	—	0 18 0	39,021	Transvaal	5, Copthall buildings
Worcester .....G	3¹¹⁄₁₆ 3¹⁵⁄₁₆	3¼	1 0	20% Aug. '94	1 0 0	90,727	Witwatersrd.	8, Old Jewry.
Zambesia Explora.	2¾ 3	2¾	1 0	—	1 0 0	45,000	Transvaal	13, George-st., E.C.

COAL, IRON, AND MISCELLANEOUS COMPANIES.

Name.	Closing Price, Sept.28,1894	Closing Price, Sept.21, 1894.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
			£ s.		£ s. d.			
African Gold Recv	1⅞ 1⅞	1¹⁵⁄₁₆	1 0	10 p c Oct. 94	1 0 0	175,000		23, College Hill, EC
Albion Steam	11⅜ 11⅝	11⅜	10 0	10 p c Feb. 94	10 0 0	22,000	Pontypridd ...	6, Crosby-sq. E.C.
Aluminium, "A"	1¼ 1⅜	1¼	1 0	2/6 Sept. 89	1 0 0	60,000		13, Ab hurch Lane
Andrew Knowles..	1¾ 2	1¾	5 0	4s Mar. 94	3 5 0	24,400	Pendlebury ...	Pendlebury, nr Man.
Do do	27 31	27	50 0	7/6 July 94	50 0 0	600	Pendlebury ...	Pendlebury, nr Man.
Do Mort. Debts.	101 103	101	100 0	5 p c July 94	100 0 0	£125,000	Pendlebury .	Pendlebury, nr Man.
Arniston.	25¾	25¼	10 0	25s May 94	8 0 0	6,500	Arniston	10, S. Andw-sq Edin.
Ashbury Carr. Co.	19 22	19	50 0	28/- Oct. 92	50 0 0	3,000		Openshaw, Man.
Do do	1¼ 2¼	1¾	11 0	3/3 Oct, 92	6 10 0	9,822		Openshaw, Man.
Aus. Gold Recovry	¾ ⅞	¾	1 0	...	1 0 0	160,000		23, College Hill, EC
Barrow Hem. Ord.	1¾ ¾	1¾	7 10	...	7 10 0	150,000	Barrow-in-Fur	10, S. Swithin's-lane
Do 6 p.c. Pref. ..	4¾ 5¼	4¾	7 10	...	7 10 0	50,00	Barrow-in-Fur	10, S. Swithin's-lane
Bolckow Vaughan	12 12¼	12½	20 0	10s Mar. 94	20 0 0	81,488	York & Durhm.	16, Philpot-lane.
Do do	6¾ 6¾	6½	20 0	6s Mar. 94	12 0 0	93,045	York & Durhm	16, Philpot-lane,
Do 5 p. c. Pref.	21¾	21¾	20 0	5 p c Feb. 94	20 0 0	23,604	York & Durhm.	16, Philpot-lane,
Cairntable	8 8½	8	10 0	10 p c Dec. 92	10 0 0	6, 38	Scotland	100, Welling-st, Glas
Calderbank Steel &c	2 2½	2	10 0	2½ Oct. 91	10 0 0	15,000	Near Glasgow	63, Vincent-st., Glas
Do 6 p c Pref ...	7¼ 7½	7¼	10 0	6 p c Oct. 91	10 0 0	1,000	Near Glasgow	63, Vincent st., Glas
Castel Gold Exting	13/- 15/-	1	1 0	7½% Dec. 93	1 0 0	168,0		108A, Hope st., Glas
Do 3rd Issue ...	7/9	7/9	1 0	...	0 15 0	30,000		108A, Hope st., Glas
Consett Iron.....	20¾ 21¾	20¾	10 0	9s July, 94	7 10 0	110,000	Durham	Consett, Co. Durham
Do 8 p. c. Pref.	10 10½	10	8 0	4s July, 94	8 0 0	100,000	Durham	Consett, Co. Durham
Cowdenheath	15	15	10 0	15 p c Aug. 94	8 10 0	15,000	Fife.....	Cowdenheath, Fife,
Do 5 p. c. Pref	11¹³⁄₁₆	10⅞	10 0	5 p c Feb. 94	10 0 0	1,000	Fife.....	Cowdenheath, Fife
D. Davis and Sons	13 13¼	12¾	10 0	10 p c Aug. 94	10 0 0	45,000	Rhondda	138, Leadenhall-st.
Ebbw Vale.....	8¾ 8¾	8¾	23 0	10s June 94	20 0 0	69,754	South Wales...	122, Cannon-street
Do do	10¼ 11	10½	23 0	10s June 94	23 0 0	4,721	South Wales..	122, Cannon street
Fife Coal	29¼	29¼	10 0	3 p c Aug. 94	9 0 0	12,000	Fife.....	Leven, Fifeshire.
Fraser & Chalmers	1⅛ 1⅜	1⅛	5 0	4/- Oct. 91	5 0 0	105,000		43, Threadneedle st.
Gen. Mining Assoc.	5 5¼	7	5 10	15/- Apr. 94	5 10 0	27,469	Nova Scotia ...	Bloomfield House, EC
Great Western (A)	8½ 8¾	8½	5 0	6 p c Mar. 94	5 0 0	10,000	Pontypridd ...	35, W. Bute-st., Cardiff
Do do (B)	4¾ 5¼	4¼	5 0	10 p c June 94	5 0 0	50,000	Pontypridd ...	35, W. Bute-st. Cardiff
Great Wyrley	120	120	100 0	...	100 0 0	600	Great Wyrley	Great Wyrley, Walsall
Hamstead	21¾ 22½	21¾	20 0	10/- Aug. 94	20 0 0	5,000	Great Barr ...	Gt. Barr, nr Birm.
Do 7½ p c Pref	32	32	20 0	15/- Aug. 94	20 0 0	5,000	Great Barr ...	Gt. Barr, nr. Birm.
Henry Briggs (A)	13½ 14	13½	15 0	18/9 Aug. 94	12 10 0	12,965	Normanton ...	Whitwood, Yorks.
Do do (B)	9½ 10	9½	15 0	12/9 Aug. 94	8 10 0	11,405	Normanton ...	Whitwood Yorks.
International	3¼ 3½	3¼	5 0	2½ p c Sept 94	5 0 0	13,820	Glamorganshr	59, Mt. Stre-t, Cardiff
J. Brown & Co., ..	15¾ 15¾	15	20 0	7/6 July 94	15 0 0	58,000	Yorkshire	12, Finch-st., EC
Do 5 p c Pref..	11¾ 11¾	11¾	10 0	5 p c June, 94	10 0 0	18,000	Yorkshire	12, Finch-st., EC
John Watson	12½	12¹⁄₁₆	10 0	12s May, 94	8 10 0	13,333	Lana k&Stirlg	23, Vincent-st., Glas
Do 6 p. c. Pref.	12¾	12¼	10 0	...	10 0 0	6,666	Lanark&Stirlg	123, Vincent st., Glas
Lothian House	6¾ 7	6¾	4 0	...	3 0 0	18,658	Lofthouse	Lofthouse, Yorks
Lothian Pref. ...	7	7	10 0	2¼ p c May 94

PROVINCIAL SHARE MARKETS.

THE CORNISH MINE SHARE MARKET.

MR. SAMUEL JOHN DAVEY, Dealer in Cornish Mine Shares, Redruth, Cornwall, reports under date of September 27 (4 o'clock) as follows:—We have had a very quiet market this week, and changes have not generally been important. To-day market is steady, but inactive. Following are quotations:—Blue Hills, ⅛ to ¼; Carn Brea, 7 to 7⅛; Cook's Kitchen, ⅛ to ¼; Dolcoath, 68 to 69; East Pool, 7⅞ to 8⅛; Killifreth, £2 17s. to £2 19s.; South Condurrow, ⅛ to ¼; South Crofty, 1 to 1⅛; South Wheal Frances, ¾ to 1; Tincroft, 11⅛ to 12; West Frances, 1⅛ to 2; West Kitty, 6 to 6⅛; Wheal Agar, 1⅞ to 2; Wheal Basset, 1 to 1⅛; Wheal Grenville, 18 to 18½; Wheal Kitty (St. Agnes), 12s. to 14s.; Polberro, 1¼ to 1⅜.

Mr. MICHAEL WILLIAMS BAWDEN, Mining and Assaying Offices, Liskeard, Cornwall, writes (September 27) as follows:—The mining market has been dull and inactive throughout the week, on the fluctuation of tin. Prices generally are easier, with a limited amount of business. Closing prices:—Carn Brea, 6⅞ to 7; Cook's Kitchen, ⅛ to ⅜ x.c.; Devon Consols, 1⅛ to 1⅜; Dolcoath, 68⅛ to 69; East Pool, 8⅛ to 8⅜ xd.; Killifreth, 56s. to 57s. 6d.; Levant, 6⅛ to 6⅜; Phœnix United, ⅛ to ⅜; Polberro, 1⅛ to 1⅜; South Crofty, 1⅛ to 1⅛; South Frances, 1 to 1⅛; Tincroft, 11⅛ to 11⅞; South Condurrow, ⅛ to ⅜; West Frances, 1⅛ to 2; West Kitty, 6⅛ to 6⅜; Wheal Agar, 1⅞ to 2; Wheal Basset, 1⅛ to 1⅜; Wheal Friendly, 2s. to 3s.; Wheal Grenville, 17⅞ to 18; Wheal Kitty, 12s. 6d. to 14s.

Messrs. ABBOTT AND WICKETT, Stock and Share Brokers, and Mining Share Dealers, Redruth, write under date of Thursday, September 27:—A quiet market all the week, with no disposition either to buy or sell. Dolcoath are flat at 68⅛, but after the next meeting it is probable that the shares will be more freely dealt in. Quotations herewith (4 o'clock):—Blue Hills, ⅜ to ½; Carn Brea, 6⅞ to 7; Cook's Kitchen, ⅛ to ⅜; Dolcoath, 68 to 69; East Pool, 8 to 8⅛; Killifreth, 56s. to 58s.; Polberro, 1⅛ to 1⅜; South Condurrow, ⅛ to ⅜; South Crofty, 1⅛ to 1⅛; South Frances, ⅞ to 1; Tincroft, 11⅛ to 12; West Frances, 1 to 1⅛; West Kitty, 6 to 6⅛; Wheal Agar, 1⅜ to 2; Wheal Basset, 1 to 1⅛; Wheal Grenville, 18 to 18½; Wheal Kitty, ⅛ to ⅜. Tin 71⅛.

MANCHESTER.

Messrs. JOSEPH R. and W. P. BAINES, Stock and Share Brokers, Queen's Chambers, 7, Market-street, write September 27, 1894 (noon): With few exceptions (these being in home rails) all the railway markets show lower prices, the declines in many cases being fairly severe. Amongst home rails Lancashire and Yorkshire have further improved ⅛ to 1, and Caledonian Deferred, Great Eastern, Great Western, and South Eastern A in small fractions (⅛ to ¼), but the rest of the alterations, a decided majority, are lower—viz., Brighton A 2⅛ to 2⅜, Caledonian undivided ⅜, Metropolitan District ⅝, Sheffield A ½, Midland ½, London and North-Western ⅜, North Eastern ⅜, York A and Chathams ¼ each, and North British ½. The remaining railway departments furnish only declines, so it will be quite sufficient to remunerate them without further comment.—Canadians: Pacifics 8½, Grand Trunk Ordinary 3 16, Guaranteed and First Preference each 2½, Second Preference 1½, and Third Preference ¾.—Mexican Rails: Ordinary ⅜, First and Second Preference ¼ each.—Americans: Atchison Income Bonds $1¼, Denver Preference $1¼, Milwaukees, $1½; Readings, $1½; Norfolk Preference, $1½; Atchison Ordinary, $1; and a lot of others where the declines are expressed in greater or lesser fractions of a dollar. Up to the last day or two prices have held up pretty well, but in all sections the declines named above have been registered in that time—viz., yesterday and the day before. Traffics in Home Rails, excepting for the Scotch stocks, come out with some substantial increases. Consols have further declined ⅛ from their recent high prices. The only change in Colonial Government stocks and bonds is a decline of ⅛ in Victoria Railway Inscribed stocks. Home Corporation stocks, &c., stand well; Blackburn Three and a-Half is 1; Birmingham Three and a-Half per Cent., ½; and Manchester Four per Cent., ½ higher; these being the only alterations there are to record. Foreigners, in common with most of the major markets, show but little on the upward side, but numerous changes in the other direction. Higher: Argentine Five per Cent. ⅛, Portuguese Three per Cent. ⅛. Lower: Brazilian Four per Cent. 1⅛, ditto Four and a Half per Cent. 1, Russian Four per Cent. 1, Argentine Six per Cent. ⅛, Mexican Six per Cent. ⅛, Turkish D ⅛, Uruguay Three and a Half per Cent. ⅛, Turks (1871) ⅛, and Italian Rentes ⅛. Only a very moderate business is to be reported from the miscellaneous classes of the market, and as regards variations on current prices they are very contradictory viewed *en bloc*, still in some classes, or rather in some individual cases, the changes are of fair amount.

BANKS.—Salfords have changed hands to a fair extent, but the rest of the business is of a very desultory character. Higher: Bank of Liverpool ⅜ to ½, London and Midland ½, and Lancashire and Yorkshire ¼. Lower Consolidated 1-16 to ⅛.

INSURANCE.—A very small number of transactions forms the record of the week's business. Prices whilst numerically the balance of change is on the downward side; the amount of rise in the minority of advances to some extent equalises matters.—Higher: Commercial Union ¼ to ½, British and Foreign Marine ⅛, London, Liverpool, and Globe ⅛, and Equitable Fire, &c., 1s. to 1s. 6d.—Lower: Boiler Insurance and Steam Power ¼, Thames and Mersey 3 16, and Lancashire, Maritime, Reliance Marine, and Union Marine 1-16 each.

COAL, IRON, &C.—With at the same time very little business doing, prices have gone off in nearly all cases where change is to be noticed. Ebbw Vales ⅜, Bolckow ordinary fully paid ⅜, ditto £12 paid ¼, and Sheepbridge A ¼ lower, and the only advances are those of ⅛ in Doman Longs, and 2 in Parkgate Iron.

MINES.—Burma Ruby is 1 16 up, but Rio Tintos are 5 16, De Beers ⅛, Cape Copper 1-16, and Ooregum ordinary 1-16 down.

COTTON SPINNING, &C.—Market very dull yet, and prices without any alteration worth naming.

TELEGRAPHS.—This market is distinctly better, the following being higher—viz., Telegraph Constructions, 1; Western and Brazilian, ⅜; Anglo Deferred, ⅛; Direct United States Cable, ⅛; Eastern Extension, ⅛; and West India and Panama ⅛, with no changes of an adverse character to set against them.

BREWERIES.—Allsopps still furnish the sensations in this market. After rapid and, in some cases, wide fluctuations within small lapses of time, these show a rise of 6 on the week. Other changes as follow:—Higher, Taylor's Eagle, ⅜; Chesters, ⅛; Bents, ⅛.—Lower, Hardy's, ⅛; Manchester, ⅛ to ¼.

MISCELLANEOUS.—Transactions very meagre, a few dealings in Ship Canal issues being nearly all reported. Gas Light and Coke A Ordinary are 2 to 5, and Coats ⅜ up, besides a few others showing advances of 6d. to 5s. On the other side come Suez Canal with fall of 1, United Alkali Ordinary 11-16, Ditto Preference ⅛ to , and several others to the extent of ⅛.

LATER (4 p.m.)—Home rails quiet, without any changes in prices worthy of note. Americans opened lower in sympathy with prices from New York, but there was no selling pressure, and early figures have been maintained fairly well throughout the day. Canadians are better for most of the Trunk issues, but the ordinary are easier to the extent of about ⅛.

SCOTCH MINING AND INDUSTRIAL COMPANIES SHARE MARKETS.

STIRLING.—Mr. J. GRANT MACLEAN, Stockbroker and Ironbroker (September 27), writes:—During the past week there has been less business doing. Prices of metals are generally lower, and this has led to some realisations, but trade reports are still encouraging. The fortnightly settlement is now in progress, and the rates of continuation to the new account, October 11, have been light.

In shares of coal, iron, and steel companies, prices are steady. Steel Company of Scotland shares have been fluctuating from 53s. 6d. to 57s. 6d., on rumours as to the prospects of the Debenture issue. Bankrock Coal shares wanted. Bolckow Vaughan are at 12½, Bowling Iron 30, Ebbw Vale 8⅛, Fifeshire Main Collieries 5s. to 10s., Marbella 65s., and Wilson and Clyde 11½.

In shares of copper concerns prices have been easier, in sympathy with the market for the metal. Tharsis touched 99s. 3d. and Tinto 15 5-16, but are both now better, Arizona are at 10s. 3d. and Cape 30s.

In shares of gold and silver mines a fair amount of business has been done. The principal transactions have been in West Australian descriptions, which are in favour. Montana have improved from 15s. to 16s. California Milling and Mining and Victoria and Altamira both offered. Nouveau Monde wanted. American Belle are at 2s. 3d.; African Gold Recovery, 29s. 6d.; Argentine Concessions, 2s. 9d.; Broken Hill Proprietary, 60s. 6d.; Bayley's Reward, 23s.; Balaghat, 7s. 6d.; Barrett, 3s.; Cassel, 13s. 3d.; Caratal, 9d.; Dickens Custer, 7d.; Eaglehawk, 1s. 9d.; Golden Gate (Cal.), 5s.; Golconda, 26s. 3d.; Gold Fields Deep, 25s.; Hampton Lands, 56s. 3d.; Ivanhoe, 9s. 6d; Klerksdorp Estates, 1s. 6d.; Lake View, 6s. 6d.; Macate, 2s. 3d.; Mawson's Reward, 30s.; May Consolidated, 22s. 6d.; Nigel, 75s.; New Chums, 14s.; Pigg's Peak, 3s. 9d.; Pioneer, 26s. 3d.; Roodepoot Deep, 22s. 6d.; Sheba, 31s. 6d.; Stanhope, 40s.; Star of the East, 17s.; True Blue Block, 2s. 9d.; and West Australian Gold Fields, 51s. 3d.

In shares of Miscellaneous companies there is little alteration to notice. In oil companies Broxburn are at 8⅛, and Young's 20s. Glenboig Fireclay are at 88s. 6d.; Lawe's Chemical, 7⅛; Nobel's Explosives, 14½; and White Lead, 3s. 9d.

EDINBURGH.

Messrs. THOMAS MILLER and SONS, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of September 27:—There is very little change to notice in the present prices of Scottish railway stocks and those of a week ago. Some of the heavy English stocks have declined, but not to any serious extent. The markets have again become very quiet. Canadians and Americans lower. Bank shares unchanged. In Insurance shares Commercial Union have improved from 33⅝ to 34⅛. Northern from 67 to 67¾, Scottish Union and National A from 86s. 6d. to 87s., while Liverpool, London, and Globe have receded from 48 7-16 to 48¼, North British and Mercantile from 40⅛ to 39½. Lancashire from 6 to 5⅞. Some Financial Trust stocks have been enquired for. Mineral shares little changed. Allsopps' Brewery have advanced from 113½ to 120½, Edinburgh United Breweries from 82s. to 95s. Coats' shares have risen from 17⅝ to 18⅛, while the preference have declined from 16 1-16 to 15 11-16. Nobel Warrants 7s. 6d. up at 14½.

MINES EXPLOITATION SYNDICATE (LIMITED).—The extraordinary activity that has recently been shown in the development of the mining districts of Western Australia is attracting, as is well known, a considerable amount of capital; in point of fact, it seems to be furnishing the outlet for the money which, owing to the depression of late, has been lying practically idle. The tendency of the times in mining matters—as is natural, of course—is to save intermediate profits where possible, and it is only just that mining investors should have the opportunity of obtaining their properties at bedrock, and so securing their share of the profits of promotion. One of the latest of these companies is the Mines Exploitation Syndicate (Limited), whose offices are at 8, Drapers'-gardens, E.C. The capital of it is £10,000, the shares, we are informed, having been issued privately. We are given to understand also that already sufficient shares have been applied for to enable the directors to go to allotment, though applications are still being received. The managing director is Mr. A. E. Walton, M.E., F.G.S., M.I.M.M., a mining expert, we believe, who has had considerable experience on most of the well-known gold fields. Such a name should certainly be a guarantee of the *bona fides* of the concern, whose career we shall watch with interest.

ABBOTT'S GOLD MINE (LIMITED).—We have received a few particulars of a new West Australian company about to be formed to be entitled "Abbott's Gold Mine (Limited)." The capital, we are informed, is to be £100,000, in 100,000 shares of £1 each. It will be formed, we learn, to acquire and work Abbott's Gold Mine (Mount Vranizan) in the Murchison Gold Fields.

NEW SPES BONA GOLD MINING.—An extraordinary general meeting of this company was held on Thursday, at Liverpool, to confirm certain resolutions previously passed in connection with the reconstruction of the company.—Mr. Harmood Banner, who presided, moved the adoption of the resolution, and explained that the four directors nominated by the home board were Messrs. James Hay, Chairman of the Jumpers Gold Mining Company; R. Lys, managing director of the Crown Reef Company; T. B. Jamieson and J. Hamilton Leslie. Messrs. Barnato Brothers had nominated Messrs. W. Joel, S. B. Joel, and the Hon. J. Tudhope.—The resolutions were confirmed.

REPORTS FROM THE MINES.

We find it necessary to announce that, owing to the vast numbers of mines, reports, and items of mining intelligence which reach us invariably very late—up to, and frequently after the time of going to press—it is impossible to guarantee the insertion of all of them in the issue in which, in ordinary course they should appear. We always endeavour, however, to make this important feature as complete as possible, and if the secretaries of mining companies, mining captains, and others would kindly make an effort to let their reports, etc., reach us early on Fridays, when it is not possible to let us have them earlier in the week, their doing so would go far to ensure their insertion, and to promote the completeness of our Mining Intelligence.

BRITISH MINES.

DEVON GREAT CONSOLS.—William Clemo, September 27: Watson's engine shaft. In the 172 fathom level east the lode is promising, and is yielding 1 ton copper and mundic ores per fathom. In Burgoyne's rise in the back of the 172 fathom level east the lode is 4 feet wide, producing 3 tons copper and mundic ores per fathom for length of rise 9 feet. In Harvey's winze sinking below the 160 east the lode is looking better and yielding 3 tons copper and mundic ores per fathom. In the 148 fathom level east the lode is 4 feet wide, producing 1 ton copper and mundic ores per fathom. Operations both underground and at surface are proceeding satisfactorily.

DRAKEWALLS.—M. Bawden, September 25: I am pleased to report that the sinking of the engine shaft to the 190 has been completed, and plat cut 9 feet south for the full length of shaft 12 feet, and we are now making good progress by the aid of rock drills in driving the crosscut south to intersect the lode. This work will be pushed forward as much as it possibly can be done through the granite, and it is expected that a profitable lode will be intersected. We have 32 men stoping, and it is fairly satisfactory to find that although we have a considerable amount of dead work on hand that we can with our returns of tin and arsenic about meet the mine expenditure, and we shall make every effort to have the balance on the right side. The stopes in bottom of the 160 east on line of junction of lodes are looking well for arsenic. We sent away yesterday for sale about 5½ tons of tin for the four weeks past, and have also a good lot of arsenic soot during the same period. We are now engaged in taking up the water at the 50 in the western part of the mine, and shall accomplish this before the winter sets in.

LEADHILLS.—W. H. Paull, September 24: Brown's vein. We have holed the 160 fathom level south of Jeffrey's shaft to same level north of Wilson's shaft. It will, however, take some days yet to square up the drivages, and when this is done I purpose placing the men to drive the 160 south of Wilson's shaft and north of Jeffrey's shaft; also to put up a rise over the said level south of Jeffrey's shaft to prove the ore ground recently passed through there. There is an increase of water in winze sinking below the 145 fathom level south of Wilson's shaft, but no change of note in the vein or in the stopes being worked over that level. The vein in the 115 fathom level driving north of Jeffrey's shaft is 4 feet wide, composed chiefly of stone and spar, and not containing any ore at present. No. 1 stope over this level north of Jeffrey's shaft is worth 30 cwts. of lead ore per fathom. In the 100 fathom level driving south of Wilson's shaft the vein is 4 feet wide, soft, and unproductive. There is no alteration worthy of remark in either of the cross cuts at the 100 fathom level. The vein in the two stopes above drift over the 100 fathom level south of Wilson's shaft will produce on an average 45 cwts. of lead ore per fathom. In stope over the 85 south of Wilson's shaft the vein is 4 feet wide worth 100 cwts. of lead ore per fathom. In stope below the 70 south of Wilson's shaft the vein is 4 feet wide, producing 25 cwts. of ore per fathom. In the stope above the 50 south of flat rod shaft the vein is 4 feet wide, yielding 40 cwts. of ore per fathom. The vein in stope below the 35 south of flat rod shaft is worth 30 cwts. of ore per fathom.—Sarrowcole vein. But very little has been done in driving Gripp's adit southwards, men being unwell. At surface all things are going on regularly, and we have secured the remainder of our corn.

SOUTH CONDURROW.—September 26: We have passed through a branch in the 163 cross cut north, but we do not expect to intersect the lode yet. This branch will drop into the main lode before it underlies into the shaft. We like to see these "droppers" or "feeders" in connection with the flat lode as they generally improve it. The ground is moderately easy for sinking the shaft below the 163. The lode in the 153 end west is letting out water freely, and carries good stones of tin. The stope in the back of the 153 west is worth £10 per fathom.—(Signed) W. Rich, Wm. Thomas, Fred Rich.

WEARDALE.—Report on Weardale Company's Mines for week ending September 22: Groverake. Adamson's drift west, vein 3 feet wide of spar, slow to drive, worth 16 cwts. per fathom. Firestone drift west, we have cross cut to the north cheek, vein 4 feet wide of spar, extremely poor, abandoned for the present. Firestone drift east, strong sparry vein, poor in ore, worth 8 cwts. per fathom. Loop level to take water from Rake level, strong sparry vein, no ore to value. Groverake, cubic fathom stopes worth 10, 12, 14, 12, 14, 12, 14, and 8 cwts. per fathom. Tribute ore returned for the week 24 bings.—Boltsburn. Cross cut south from Watts level to prove flat worth 8 cwts. per fathom. Stope above Watts level in vein worth 18 cwts. per fathom. Stope above Watts level in south flat worth 28, 32, 30, 30, 20, 16, 16, 18, and 14 cwts. per fathom.—Greenlaws. Nattrass Gill drift, stopes worth 15, 18, and 15 cwts. per fathom. Watson's drift, vein nipped and hard to drive. Lowe's drift, rise to drift above scar limestone, vein looks better and shows more strength in the plate, is 2 feet wide, of spar, plate, rider, and veinstuff, mixed with ore, but not to value.—Lee's sump. The stope continues a strong sparry vein, looking better this week, worth 30 cwts. per fathom. Tribute ore returned for the week 24 bings.—Sedling. Driving 64 level east vein improved, worth 16 cwts. per fathom. Stopes above 64 level east worth 14, 16, 16, and 18 cwts. per fathom. Stope above 64 level west worth 16 cwts. per fathom. Driving the 74 level east in the scar limestone the vein is 3 feet wide of fluor and quartz spar and rider mixed with ore, worth 12 cwts. per fathom. We have finished sinking below the 74 level, and driving will be commenced. Ore raised for week 66 tons, ore dressed for week 79 tons, ore, slag, and fume smelted for the week 126 tons, producing 66 tons of pig lead.

WHEAL FRIENDLY (St. Agnes).—September 25: The Pink lode in the 10 fathom level east is being driven by a full pare of men at £7 per fathom. The lode is 4 feet wide, and producing 45 lbs. of tin to the ton of stuff. The intermediate end east of rise is being driven by a full pare of men at £8 per fathom. The lode is 4 feet wide, and during the past week it has very much improved for tin. There is no other change to notice since my last report.

WEST KITTY.—September 27: The 108 fathom level west is worth £7 per fathom. The rise in back of this level is worth £7 per fathom. We expect to hole this rise to the winze in bottom of the 94 fathom level in a few days. When these points are holed it will give good ventilation to the western ground at these levels, also open up a large piece of ground for tributing. The 94 fathom level west is worth £8 per fathom. The 84 fathom level west is worth £11 per fathom. The 60 fathom level east, south of slide, is worth £10 per fathom. The 60 fathom level west, south of slide, is worth £18 per fathom. We have met with a small crosscourse in this end, which has disordered the lode a little, but shall get clear of it again in a day or two. The rise in back of this level is worth £10 per fathom. We are making good progress at Thomas's shaft, also in building the engine house. Our stopes and tribute pitches continue to yield the usual quantity of tin.—(Signed) Joel Hooper, John Williams.

COLONIAL, INDIAN, AND FOREIGN MINES.

QUEEN CROSS REEF.—Copy of manager's report for fortnight ending August 6: Since last report the contractors have sunk the vertical shaft a further 15 feet, making the total 905 feet 6 inches from the surface, and 83 feet below the timber. Barrett and party, tributers, have finished a crushing of 111 tons of stone for a yield of 177 ounces 7 dwts. of smelted gold at the Quartz Crushing Syndicate's mill. Fox and party, tributers, have started crushing about 40 tons at the Fair Rosamond mill. Brouskill and party have about 100 tons at grass, and will start to crush about 130 tons during the next fortnight. Everything in connection with the mine is in good working order.

VICTORIA AND QUEEN.—Copy of Manager's report for fortnight ending August 8: During the past fortnight No. 2 drive at the bottom of straight has been driven 15 feet, making it a total distance of 21 feet. The reef it almost 10 inches thick, but it is not showing so much mineral as last breaking down. Stacey and party have sunk your underlie an additional 20 feet, making a total depth of 47 feet from No. 2 plat. The reef averages about 8 inches of very fair looking stone. The reef in the stopes at the back of No. 2 level is about the same as during last fortnight. Gillis and party have driven No. 1 level west a further distance of 10 feet, making it a total of 69 feet from slide. The reef is about 20 inches of heavy mineral stone. I have also started one man in each shift to stope along the back of this drive about 20 feet from face on 1 foot of stone. We have hauled 40 tons of quartz during the fortnight, also crushed 116 tons for a yield of 183 ounces 12 dwts. 15 grains of gold. Machinery and everything connected with the mine in good working order.

VICTORY (Charters Towers).—Copy of mining manager's report for fortnight ending August 11: Stoping over No. 11 level on a reef averaging 18 inches, which extends for a distance of about 30 feet, but appears to be widening as we get up on to it, the stone is of good quality. Winze on Papuan reef sunk 7 feet, total 50 feet, reef in bottom 6 inches, carrying good mineral. Drive from Papuan Company's lease extended 9 feet, total 117 feet, reef in face 2 feet, fair quality. Raised from Papuan shaft 5 tons, from No. 1 shaft 35 tons.—No 2 Shaft. Underlie sunk 8 feet, total 360 feet—carries 30 inches stone in face. No. 7 level stopped as footwall rose up very suddenly, and we are now stoping on 2 feet of stone above drive which can be more advantageously worked from side of shaft, quality of stone poor. Stoping from shaft up to No. 6 level on 6 to 30 inches medium quality. No. 6 level driven 14 feet, total 105 feet, carries 12 inches in face. Stopes over this drive 6 to 20 inches, poor quality. No. 5 level driven 12 feet, total 236 feet, no stone here during fortnight, stoping above this drive on 2 feet medium stope. Cross drive No. 4 east driven 10 feet, total 220 feet carries 9 inches white stone. Cross drive No. 3 west driven 7 feet, total 70 feet, face shows few inches white stone. In rise in No. 3 east the reef averages 16 inches for about 30 feet, quality fair. No. 1a driven 16 feet, total 174 feet, from 3 to 18 inches, carrying a stope over this drive on 12 inches. Stone raised 285 tons. Cross drive from Clarke's Worcester shaft driven 30 feet, total 86 feet, face in formation.

AUSTRALIAN BROKEN HILL CONSOLS.—The mining manager reports by mail for the fortnight ended August 16: Block 96. 280 level east prospecting drive, No. 4 rise. Stopes driven 6 feet. Stoping on rich vein continued, but the yield of rich ore has fallen off considerably. The mundic vein is still showing strong, both upwards and downwards.—280 level west prospecting drive. Work here suspended for the present, men being engaged in timbering stopes in the eastern workings. Incline sunk 3 feet 6 inches. In taking up the lode it was found to widen, consisting of carbonate of iron and calcite of a promising character, but shows no ore up to the present.—No. 4 level east off incline. Stopes driven 6 feet 6 inches. Lode formation about 2½ feet wide, carrying two veins of carbonate of iron, containing galena and fahlerz. No. 1 rise off No. 4 level east off incline driven 8 feet. The lode here is widening a little; galena and fahlerz has been met with.—Tributers. Stopes 280 level west above No. 2 winze, block No. 2. The lode here consists of iron, carrying good grade galena. Tributers have raised a fair quantity of ore.—Note. The quantity of rock mined during the fortnight was 2577 cubic feet.

BRITISH BROKEN HILL PROPRIETARY.—Mining manager's report for week ending August 8: Blackwood No. 1 shaft. 400 feet level north drive off west crosscut extended 3 feet during week, total length 52 feet; face in low grade sulphides. South drive off same crosscut driven 4 feet, total length 74 feet; face showing sulphides of better grade.—Howell No. 2 shaft. Are cutting out plat on west side of shaft on 300 feet level; will be finished in a few days.—200 feet level. East crosscut on 10th floor, far north stopes has been lengthened 16 feet, total length 94 feet. Have stopped it for the present, and are now starting a south drive off same in a carbonate ore body, at a point 14 feet back from present face of crosscut.—Marsh No. 6 shaft, 2nd level. Winze in north drive off No. 3 east crosscut sunk 11 feet, total depth 21 feet: bottom of winze still in good grade carbonate ore. Have obtained from here for the week 2 tons second class ore, averaging 30 per cent. lead and 21 ounces silver per ton, and 17 tons third class ore, 27 per cent. lead, and 13 ounces silver per ton. Have started an uprise in same (north) drive at a point 20 feet north of above winze, and have risen same 4 feet through fair grade ore; roof still in carbonate ore. Have broken 3 tons second class ore, averaging 14 per cent. lead and 28 ounces silver per ton. No. 4 east crosscut off south west drive driven 11 feet, total length 30 feet, face showing carbonate ore. Have obtained 1 ton of seconds, assaying 21 per cent. lead and 45 ounces silver per ton.—Stopes: Have stopped working north off No. 2 west crosscut south stope; have broken 4 tons first class ore, assaying 25 per cent. lead and 40 ounces silver per ton; also stope south off No. 3 west crosscut. No. 3 west crosscut south stope have obtained 8 tons third class ore, averaging 27 per cent. lead and 13 ounces silver per ton.—North stope. Have broken 10 tons first class ore, averaging 32 per cent. lead and 127 ounces silver per ton. Assays for the week vary from 10 to 55 per cent. lead and 8·3 to 447 ounces silver per ton.

— Mining manager's report for week ending August 15: Blackwood (No. 1) shaft, 400 feet level. North drive off west cross cut is extended 4 feet, total length 56 feet. Face in mixture of sulphides, quartz and mullock of no value. South drive off same cross cut driven 4 feet, total length 78 feet. Face showing sulphides. —Howell (No. 2) shaft, 300 feet level. Have completed cutting out plat for this level, and have started a drive west for a short distance preparatory to driving northwards for the lode.—200 feet level. South drive started off east cross cut on 10th floor, far north stopes, extended 14 feet, total length 14 feet. This drive is being put in on the course of the lode, and is in fair grade carbonate ore. Are cleaning out the old east cross cut opposite 200 feet level plat of this (Howell) shaft.—Marsh (No. 6) shaft, second level. Winze in north drive off No. 3 east cross cut is sunk 9 feet, total depth of 30 feet, still showing fair grade carbonate ore in the bottom. We broke 1 ton second class ore, assaying 35 per cent. lead and 17 ounces silver per ton, and 17 tons third class, 32 per cent. lead, 12 ounces silver per ton. Uprise over same (north) drive risen 5 feet, total height 9 feet; roof in good grade carbonate ore. We broke 8 tons, averaging 14 per cent. lead, 49 ounces silver per ton. No. 4 east cross cut off south west drive driven 9 feet, total length 39 feet and stopped. We broke 1¼ tons ore, averaging 36 per cent. lead and 93 ounces silver per ton, ¼ ton, 17 per cent. lead and 22 ounces silver, and ¼ ton 22 per cent. lead and 12 ounces silver. Are starting an uprise here at a point about 10 feet back from face of above cross cut, to prove ground overhead. We are dividing the winze which came down from Rettallick shaft into two compartments, and are also putting in an ore shoot in the bottom of it.—Stopes: The stope over the back of the main south drive, going northwards from No. 3 west cross cut, is opening up very well. We have broken and hoisted 4 tons first class ore, assaying 30 per cent. lead and 47 ounces silver; 5 tons seconds, assaying 21 per cent. lead and 43 ounces silver; 2 tons third class assaying 32 per cent. lead and 12 ounces silver per ton.—No. 2 west cross cut south stope: We broke 2 tons, assaying 30 per cent. lead and 93 ounces silver, and 4 tons 21 per cent. lead and 43 ounces silver.—No. 3. West cross cut, north stope, northwards: We broke 7 tons, averaging 36 per cent. and 93 ounces, 4 tons, assaying 21 per cent. and 43 ounces, 7 tons, 32 per cent. and 12 ounces silver per ton. Assays for the week vary from 13 to 50 per cent. lead and 5·5 to 150·2 ounces silver per ton.

BALAGHAT MYSORE.—From Captain Joseph Pryor, September 4: Ogle's shaft. This shaft has been sunk 6 feet 3 inches, or 41 feet 9 inches below the 800 feet level. The quartz continues from 9 inches to 1 foot wide, and assays 1 ounce 10 dwts. 9 grains. The 800 feet level south has been driven 5 feet 9 inches, or 29 feet 6 inches from the shaft. The lode is steadily improving in appearance and now yields quartz of about 3 inches wide, and worth 8 dwts. The 800 feet level north has only been advanced 4 feet, or 212 feet from shaft. The lode yields quartz of 6 inches wide, and assays 1 ounce 10 grains. As intimated in my last report, we have commenced driving the 870 feet level south from the bottom of the No. 1 winze, and have extended the same 7 feet 6 inches from the winze. It yields quartz of from 1½ foot to 9 inches wide, and assays 4 ounces 2 dwts. 5 grains. The No. 2 winze in the bottom of the 800 feet level north has been sunk 5 feet 6 inches, or 20 feet 6 inches below the level. The quartz is 6 inches wide, and assays 2 ounces 12 dwts. 2 grains. The stopes in the bottom and back of this level produce quartz of from 9 inches to 14 inches wide, and assay on an average 1 ounce 16 dwts. 6 grains. The stopes in the bottom and back of the 730 north yield quartz of about 1 foot wide, and assay on an average 1 ounce 7 dwts. 5 grains. The cross cut east at the 500 feet level has been advanced 11 feet 6 inches, or 24 feet from the shaft.—Haine's shaft. We have lately been having some very heavy rains, consequently the water has considerably increased; hence we have not been enabled to make as much progress with the work at this shaft as we had anticipated. We are, however, hoping to be able to remove the Cameron pump (referred to in my last) during this week. When this is done we shall undoubtedly be in a much better position to cope with the water, and to sink the shaft, but to avoid the possible continuance of such delays, and having recently effected a communication at the 800 feet level north of Ogle's, we have now decided to attach a run of flat rods at surface from Ogle's shaft to this shaft, and rear up the necessary pitwork from the shaft and bottom level to the required height for discharging the water through the 800 feet level south to the plunger lift at Ogle's shaft. This work is now in hand, and will be pushed forward as fast as possible. In the meantime we shall of course, continue to do our best with the existing arrangements. The 870 feet level north has been driven 17 feet 9 inches, or 63 feet 6 inches from the shaft. The quartz varies from 1 foot to 6 inches wide, and assays 5 dwts. 2 grains. The 870 feet level south has been extended 17 feet, or 77 feet 6 inches from the shaft. The quartz varies from 2 feet to 6 inches wide, and assays 7 dwts. 10 grains. We hope to communicate this level with the No. 1 winze in the bottom of the 800 feet level within the next fortnight or so. Our ventilation will not only be then considerably improved, but another section of ground will also be conveniently laid open for stoping. The 800 feet level south on the western part of the lode has been extended to, and risen against, and communicated with the stopes leading to Ogle's shaft; the further driving of this level is, therefore, now discontinued. The quartz varied from 6 inches to 1 foot wide, and assays 10 dwts. 6 grains. The No. 1 winze in the bottom of this level has only been sunk 3 feet 9 inches, or 66 feet 6 inches below the level. The quartz varies from 6 to 9 inches wide, and assays 7 dwts. 9 grains. We expect to hole this winze with the level below within the next fortnight or so. The No. 2 winze, also in the bottom of this level, has been sunk 6 feet 6 inches, or 28 feet below the level. The quartz is 1 foot 4 inches wide, and assays 13 dwts. 15 grains. The stopes in the back of this level produce quartz of from 9 to 15 inches wide, and assay on an average 12 dwts. 21 grains. A stope in the back of the 800 feet level north yields quartz of about 1 foot wide, and assays 4 dwts. 13 grains. The stopes in the back and bottom of the 730 feet level south produce quartz of from 6 inches to 1 foot wide, and assay on an average 18 dwts. 14 grains.—Tennant's shaft. This shaft has been sunk 7 feet 3 inches, or 18 feet 6 inches below the level. The lode is at present unproductive and the ground hard for sinking. The 420 feet level north has been extended 8 feet 9 inches, or 29 feet 6 inches from the shaft. The lode is decidedly changing in appearance for the better, and during the last few feet it has yielded quartz from 3 to 9 inches wide, but the assay value was very low. I am, however, hoping it will soon improve both in size and quality. The cross cut east at the 420 feet level south has been advanced 7 feet 6 inches beyond the level. The ground within the last blast or two has been undergoing a change, and we have just struck a small branch, but as yet we have not seen enough of it to ascertain its value. This, however, will be reported in my next. The 350 feet level north has been driven 11 feet 3 inches, or 167 feet from the shaft. The lode, although it continues of a kindly appearance, does not yield any quartz to value. The winze in bottom of this level has been sunk 8 feet 6 inches, or 34 feet 3 inches below the level. The quartz has improved both in size and value, being now 1 foot 6 inches wide, and assays 11 dwts. 7 grains. The rise in the back of this level has been advanced 7 feet 9 inches, or 59 feet above the level. The quartz is 1 foot 6 inches wide and assays 4 dwts. The 350 feet level south has been driven 5 feet 6 inches, or 177 feet 9 inches from the shaft. The lode presents a promising appearance, but as yet it does not produce any quartz to value. The winze in the bottom of this level has been sunk 5 feet, or 29 feet 6 inches below the level. The quartz is 1 foot wide, and assays 5 dwts. 2 grains.—Surface. The general work at surface is being proceeded with in the usual way.

BAYLEY'S REWARD CLAIM.—Mining report, Coolgardie, Western Australia, August 5: Sylvester shaft since last report has been sunk 7 feet, total now being 37 feet from chamber, or 257 feet from surface. Lode is fully 6 feet thick, and during the week have yielded the richest stone we have ever seen in the lower levels—a portion Mr. Lyon is taking to you, which doubtless you will receive at the same time as this letter. Coming from this depth it is very important. The lode looks strong, well defined, and permanent, also the gold still going down. During the coming week it will be necessary to timber up, consequently there will be no change for the next few days. South drive 220 have been extended 7 feet, total 120 feet. No particular change to report.—Western cross cut (Gorrie's). Driven for week 14 feet, total 149 feet, leaving 16 feet to complete the distance we anticipate intersecting the lode. This morning there is a great change in the face, from the little opened up having very much the appearance of lode formation, being composed of black slate material, with small veins and seams of quartz running in all directions. I do not think this can be in any way connected with Gorrie's lode, as, so far, it is perfectly dry; consequently will continue the cross cut.—160 feet level. No work done beyond completing the shute mentioned in my last to facilitate hauling from the level above. No. 2 intermediate drive, which is being driven south about midway between the 100 and 160 feet levels from the winze or continuation of Gordon shaft, has been driven 7 feet. Lode is full width of drive, hard and up to the present has not shown anything important, but expect it to improve as we continue south.—100 feet stopes still continue to yield well, but I regret to say the stone in those stopes is now getting very limited as we are getting up close to the 50 feet level, consequently it is deemed advisable to open out the intermediate drives mentioned with the object of not only prospecting, but to open up new stopes to the old one being finished, which I am in hopes we shall be able to accomplish.—No. 2 intermediate drive, as stated in my last, has been opened up north midway between the 50 and 100 feet levels Gordon shaft. This I am very glad to say looks better than we anticipated, and during the week has returned some very good ironstone containing nice gold and now looks much better than it has hitherto done. There still being large quantities of ground in this direction undeveloped, we have every reason to believe important results may be obtained by continuing work north of Gordon shaft between the 50 and 100 feet levels. Begelhole Shaft still returning some very fair stone. Everard shaft north drive has been advanced 10 feet, total 39 feet, no change to report. South drive has not yet been continued, the men being engaged timbering the drive and opening up the stopes between the rise which was poled through to the surface and Everard shaft. The stone broken shows gold freely, and judging from that seen should yield very well.—Cockshott Shaft. The south drive has been driven 16 feet, total 28 feet from shaft. The lode formation being a small vein of felspar with well defined walls bearing to the west straight for Begelhole shaft, but just at present will not continue this any further as we shall at some future time further prove its course from Begelhole Shaft and be able to decide if there is stone between the two or not.—Erection of battery (second ten head). With this work we have made good progress, the bed log and some of the other timbers having been placed in position. Stone crushed has been 72 tons, 1 ton 6 cwts. being from the strong room. Yield 700 ounces gold for the week.

BRILLIANT BLOCK.—Mine manager's report fortnight ending July 25: No. 6 level west driven 20 feet. The formation is about 15 feet thick between the walls showing a reef against the hanging wall 1 foot thick of medium quality, and 1 foot of rubble stone near footwall. No. 6 level east driven 26 feet, showing reef in face 3 feet thick of fair quality. No. 5 level west extended 13 feet, total from shaft 247 feet. There is about 1 foot of stone of low quality. No. 5 level east extended 30 feet, total from shaft 300 feet. Reef in face 3 feet thick of medium quality. Five stopes are being carried on on a reef varying from 6 inches to 6 feet thick of fair quality.—No. 4 level west. No. 2 winze, 280 feet from shaft, sunk 30 feet, carrying reef 18 inches thick of medium quality. The two stopes over the level carry a reef 2 feet thick of low quality.—No. 4 level east. Stoping over hanging wall and footwall drives on a reef from 6 inches to 2 feet thick of fair quality. Stone raised 900 tons. Stone crushed 868 tons for 745 ounces of gold.

HARRIETVILLE.—Fortnightly report of Mr. T. G. Davey, superintendent, dated August 17: Mons Meg Mine. Rise at back of 100 feet level, south of main winze, below tunnel D, advanced 16 feet, total 54 feet. Lode much disturbed, as head of fault has not yet been reached, and carrying only colours of gold. North rise at same level advanced 6 feet, total 57 feet. Lode is becoming more compact and defined, but is still poor. Rise at back of 240 feet level below J communicated to stope above.—Stopes. Lode in main stope at back of drive, south of tunnel D, 10 feet, wide, assaying 5 dwts. per ton. Stope at back of 240 feet level lode 18 inches wide, assaying 15 dwts. per ton. Commenced to stope north of shaft, at back of 100 feet level, below J, where the lode is 18 inches wide, and produces some very fine specimens. Its average assay value is 10 dwts. per ton. Lode at back of 44 feet level 5 feet wide, carrying visible gold, and assaying 18 dwts. per ton.—Saint Bernard Mine. Drive north of bottom tunnel, on a lode 620 feet from mouth of same, extended 18 feet. Lode 2 feet wide, and somewhat auriferous. South drive at same level advanced 20 feet. Lode similar to what it is in north end. We have cleared and retimbered an old tunnel known as Grimsley's, and reached the stopes, where a large lode exists, which is auriferous and worthy of further development. The filling in the old stopes contains gold in paying quantities, and is being stacked for treatment, when the tramway to mill shall have been constructed. In consequence of the heavy influx of water, due to the thawing of snow, we have not yet been able to reach the rich vein at the Pennsylvania shaft.

MYSORE REEFS.—Fortnightly report of Captain M. Scantlebury, mine agent, dated September 4: Underlie shaft. This shaft has been sunk 9 feet, now 48 feet 6 inches below the 250 feet level. The lode shows a good hanging wall and a little quartz, showing visible gold at times, but the assay value for the entire width is low —2 dwts. of gold to the ton. 250 feet level south has been advanced 11 feet 6 inches, now 59 feet 6 inches from shaft. The lode is 18 inches wide, composed of quartz and arsenical pyrites. The samples taken during the past two weeks show an average value of 6 dwts. of gold to the ton. Rise above 250 feet level north has been put up 8 feet 6 inches. Now 8 feet 6 inches above the level. The quartz is 15 inches wide, and worth 8 dwts. of gold to the ton.—Vertical shaft. This has been sunk by hand labour 3 feet 6 inches, now 17 feet 6 inches below the level. I commenced yesterday to sink this shaft with rock drills.—200 feet level north. Rise 120 feet north of cross cut has been put up 8 feet 6 inches, in order to take off stopes from. The quartz is 9 inches wide, and worth 1¼ ounce of gold to the ton. No. 1 stope in back of this level the quartz is 1 foot wide, and worth 18 dwts. of gold to the ton. 200 feet level south winze below this level has been sunk 5 feet, now 19 feet 6 inches below the level. The quartz is 15 inches wide, and the samples have varied from 3 dwts. 6 grains to 1 ounce of gold to the ton. Rise above this level has been put up 8 feet 6 inches to take off stope from. The quartz is 6 inches wide, and worth on an average 2 ounces of gold to the ton. Stope in back of this level the quartz is 12 inches wide, and worth 10 dwts. of gold to the ton. New north shaft has been sunk 12 feet, now 38 feet 6 inches from surface.

MYSORE GOLD.—R. Hancock, September 4: Mining operations for the fortnight ending September 3. Rowse's shaft, 1460 feet cross cut west. This has been driven 24 feet, making a total distance driven of 147 feet.—1460 feet level north of winze. This end has been driven 10 feet, making a total distance driven of 56 feet. The lode having become somewhat disordered we have temporarily suspended it and put the machine to drive south of winze to ascertain what we have in this direction. The last assay taken gave 10 dwts. 10 grains per ton.—1460 feet level south of winze. This end has been driven 2 feet. The lode is 2 feet wide, no assay made.—1360 feet level north, south of cross cut. This end has been driven 6 feet, making a total distance driven of 132 feet 4 inches. The lode is 1 foot wide, assaying 1 ounce 16 dwts. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 6 dwts. 12 grains.—1360 feet level north of winze. The lode in the stope in the back of this level is 6 feet wide, assaying 1 ounce.—1260 feet level north. There are five stopes in the back of this level, the average width of the lode being 4 feet 10 inches, giving an average assay of 1 ounce 4 dwts. 19 grains.—1260 feet level south. Driving south on the fold in the back of this level has been driven 20 feet, making a total distance driven of 145 feet 6 inches. The lode is 2 feet wide, assaying 1 ounce 12 dwts. 16 grains. There are two stopes in the back of this level, the average width of the lode being 3 feet 6 inches, giving an average assay of 1 ounce 4 dwts. 19 grains.—1160 feet level north. There are four stopes in the back of this level, the average width of the lode being 2 feet, giving an average assay of 1 ounce 4 dwts. 23 grains.—1160 feet level south. The lode in the stope in the back of this level is 2 feet wide, assaying 2 ounces 12 dwts. —1060 feet level north. We have two pares of men stripping down side in the bottom of this level, in which the lode averages 1 foot wide, giving an average assay of 9 dwts. 18 grains.—990 feet level north. We have a pare of men engaged stripping down side in the back of this level, in which the lode is 1 foot wide, assaying 1 ounce 21 grains.—890 feet level north. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 19 dwts. 14 grains. —890 feet level north-east. This end has been driven 15 feet, making a total distance driven of 599 feet 7 inches.—780 feet level north. The lode in the stope in the back of this level is 2 feet 6 inches wide, assaying 1 ounce 3 dwts. 6 grains.—780 feet level north on new chute. This end has been driven 26 feet, making a total distance driven of 65 feet, the lode is 3 feet wide, assaying 1 ounce.—780 feet level south on new chute. This end has been driven 3 feet, making a total distance driven of 7 feet, the lode is 1 foot 6 inches wide, assaying 11 dwts. 17 grains.—620 feet level north of crosscut. This end has been driven 5 feet 6 inches, making a total distance driven of 261 feet 6 inches; there is nothing here to report. There are three stopes in the back of this level, the average width of the lode being 2 feet 4 inches, giving an average assay of 18 dwts. 16 grains. —466 feet level north of No. 1 crosscut. This end has been driven 19 feet 8 inches, making a total distance driven of 101 feet 8 inches, the lode is 4 feet wide, assaying 3 dwts. 22 grains.—Crocker's Shaft. This shaft has been sunk 19 feet, making a total depth of 30 feet below the 400 feet level, the lode is 4 feet wide, assaying 5 dwts. 5 grains.—400 feet level north. There are four stopes in the back of this level, the average width of the lode being 3 feet 8 inches, giving an average assay of 7 dwts. 19 grains.—400 feet level south. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 5 dwts. 5 grains.—296 feet level north. There are four stopes in the back of this level, the average width of the lode being 2 feet 6 inches, giving an average assay of 1 ounce 1 dwt. 5 grains.—236 feet level north. There are five stopes in the back of this level, the average width of the lode being 1 foot 10 inches, giving an average assay of 1 ounce 8 dwts. 10 grains.—Taylor's shaft, 466 feet level north. The lode in the stope in the back of this level is 2 feet wide, assaying 18 dwts. 6 grains.—Gilbert's shaft, 520 feet level north. The winze in the bottom of this level has been sunk 7 feet, making a total depth of 45 feet. The lode is 3 feet wide, assaying 6 dwts. 12 grains. The lode in the stope in the back of this level is 2 feet wide, assaying 5 dwts. 5 grains.—520 feet level south. The lode in the stope in the back of this level is 2 feet wide, assaying 1 ounce 8 dwts. 17 grains.—360 feet level north. There are three stopes in the back of this level, the average width of the lode being 2 feet 4 inches, giving an average assay of 11 dwts. 14 grains. —290 feet level north. There are three stopes in the back of this level, the average width of the lode being 2 feet 1 inch, giving an average assay of 1 ounce 6 dwts. 11 grains.—180 feet level south. Taking away arches of ground in the back and bottom of this level, the lode averages 3 feet 6 inches wide assaying 12 dwts. 12 grains.—Tennant's shaft: This shaft has been sunk 5 feet, making a total depth of 19 feet 9 inches below the 600 feet level.—600 feet level north: This end has been driven 18 feet 6 inches, making a total distance driven of 94 feet 6 inches. There are some small branches of quartz mixed with the rock in the end.—520 feet level north: The winze in the bottom of this level has been sunk 14 feet, making a total depth of 57 feet 6 inches, the lode is 1 foot 6 inches wide, mixed, assaying 7 dwts. 19 grains. The lode in the stope in the back of this level is 3 feet wide, assaying 9 dwts. 2 grains.—290 feet level south, north of cross cut: The winze in the bottom of this level has been sunk 16 feet 6 inches, making a total depth of 48 feet, the lode is 1 foot 9 inches wide, assaying 1 ounce 11 dwts. 8 grains.—Schaw's shaft, 450 feet level north, cross cut east: This end has been driven 1 foot 6 inches, making a total distance driven of 34 feet. The winze in the bottom of this level has been sunk 2 feet 9 inches, making a total depth of 102 feet 3 inches, the lode is 9 inches wide, assaying 19 dwts. 14 grains. There are two stopes in the back of this level, the average width of the lode being 1 foot 2 inches, giving an average assay of 17 dwts. 3 grains.—450 feet level north, south of cross cut: The winze in the bottom of this level has been sunk 10 feet 6 inches, making a total depth of 53 feet, the lode is 1 foot 6 inches wide, assaying 1 ounce 18 dwts. 6 grains. There are two stopes in the back of this level, the average width of the lode being 2 feet 2 inches, giving an average assay of 6 dwts. 12 grains. 320 feet level south of cross cut. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 11 dwts. 17 grains.—McTaggart's shaft. This shaft has been sunk 13 feet 6 inches, making a total depth of 55 feet 6 inches below the 450 feet level. The lode is 6 inches wide, assaying 3 dwts. 6 grains.—450 feet level south. The lode in the stope in the back of this level is 1 foot 6 inches wide, assaying 2 ounces.—Glen shaft, 250 feet level north, cross cut west. This has been driven 14 feet, making a total distance driven of 87 feet.—Cross cut east. This has been driven 2 feet, making a total distance driven of 263 feet 6 inches.—Ribblesdale's shaft. During the last week the sinking of this shaft has been greatly hindered by water. Sunk 7 feet, making

a total depth of 388 feet.—1060 rise. This has been put up 1 foot 6 inches, making a total height of 36 feet.—Williams's shaft, 173 feet level, cross cut east. This has been driven 3 feet, making a total distance driven of 65 feet.—Water. We have had some heavy showers of rain during the past week, which has given us a good supply of water. Health good.

MILLS' DAY DAWN UNITED.—Mine manager's report for fortnight ending July 27:—Underlie shaft sunk 6 feet, total from No. 8 plat 105 feet, and timbered 15 feet. The timbering accounts for the short distance sunk. No. 8 level driven 6 feet and holed to No. 2 winze. Have commenced driving on the formation going westward, carrying 1 foot of poor stone. The reef eastward from winze is 2 feet thick of medium quality. Shall shortly commence driving on this. Have put down a double road in this level, distance 200 feet. —No. 7 level west. No. 3 winze sunk 32 feet, total from level 64 feet. Reef full size of winze. No. 4 winze sunk 18 feet on good quality stone. Stopes over this level have been carried up to the junction of footwall reef and holed to the winze from footwall level. The reef averages 8 feet of heavy mineral stone. The hanging wall stopes carry 3 feet of good stone.—Hanging wall winze. Commenced sinking No. 2 winze towards No. 8 level on 1 foot of fair stone.—No. 6 level west. The winze holed from No. 5 to No. 6 stopes. The reef averages 3 feet of good mineral stone. No. 6 west footwall drive extended 15 feet on 2 feet 6 inches of fair mineral stone. Total from main drive 110 feet. The winze under this level sunk 11 feet, total 68 feet. Holed to stopes and opened out a good block of ground.—No. 6 level east. We are stoping on a portion of stone which was left on the footwall and averages 2 feet thick of fair stone. Intermediate level east driven 15 feet (total 85 feet) and holed to No. 1 winze under No. 5 level. Stopes average 3 feet of good stone.—No. 5 level west. Winze sunk 8 feet (total 72 feet) and holed to stopes below. Stopes average 2 feet of heavy mineral stone.—No. 5 level east. Stopes average 5 feet of good stone.—No. 3 level east. Stopes average 18 inches of medium quality. Stone raised 2000 tons.

MOUNT LYELL.—The London committee have received the following report from the mine for the week ending August 9:—Engine shaft, 100 feet level. The south drive has been advanced 4 feet, total 64 feet. There is no change to report.—Intermediate. Stoping westerly has been continued; the ore body is about 5 feet wide.—50 feet level south drive. This drive has been advanced 2 feet, total 170 feet. Progress has been slow, owing to a sudden swerve in the pyrites necessitating the shooting away of a portion of the drive to allow of the truck road being laid.—No. 1 winze. The winze has been sunk 4 feet, total 43 feet. Country ironstone schist and quartz.—Stopes. Stoping on the upper floor above the north level has been carried on as usual. The ore body here is narrower, and requires considerable picking.—No. 4 tunnel rise, over old winze. The rise has been put up 3 feet, total 17 feet. The two veins of rich ore have improved somewhat in quality.—No. 3 tunnel. The contractors have driven 5 feet, total 736 feet. Country conglomerate, which breaks very small.—Ore raised. 453 bags weighed 20 tons 12 cwts. 1 qr. 12 lbs., containing 9713 ounces silver, and 3 tons 14 cwts. 3 qrs. 25 lbs. copper, or an average of 596 ounces silver and 20 per cent. copper per ton.—Ore dispatched, 237 bags, weighing 11 tons 17 cwts., containing 10,685 ounces silver, and 2 tons 16 cwts. 1 qr. 2 lbs. copper.

MYSORE WEST AND MYSORE-WYNAAD CONSOLIDATED.—Tank Block. The mining manager, Mr. P. Bosworth-Smith, reports by mail for the month of August last as follows: South Shaft. The shaft has been sunk to a depth of 427 feet 6 inches, progress for the month 7 feet 6 inches. The water is very heavy from the 400 level south, so we are putting in a donkey to take this off. After this is fixed progress should be better. 354 feet winze in north has been sunk to a depth of 37 feet 9 inches. Lode has narrowed down to 6 inches of quartz, assaying 19 dwts. 12 grains.—400 level north. This was driven to 80 feet, and the lode pinching and water coming in from the west, a cross cut was driven in that direction for 14 feet, but with no good result. The quartz in the end before it pinched out was 6 inches wide, and assayed 2 ounces 7 dwts. 12 grains. 400 level south has been driven 35 feet, making a total of 58 feet from shaft. The lode is over 3 feet wide all the way; average assay from eight samples 2 ounces 5 dwts. 12 grains. We struck a stream of water in this end that came out under pressure and rose 18 feet in the shaft. There is still a large stream of water coming in, but the pressure is lessened, and we hope to drain the ground shortly. There is about 150 tons of mixed stuff for crushing.

NINE REEFS.—Fortnightly report of Captain John Woolcock, mine agent, dated September 4: Vyvyan's shaft. There is no change to notice in the stopes working in the back of the 220 feet level to the south of the shaft. The lode formation is from 1¾ to 4 feet wide. In the No. 1 stope to the south of rise, the quartz leader is from 6 to 8 inches wide, and at times shows a good deal of visible gold. The gold makes in patches and in fine streaks through the quartz, and some of our pan washings are very good indeed, but unfortunately the leader is narrow, and we are obliged to break a large quantity of the barren part of the lode with it, which will greatly reduce the value of the ore that has to be treated. A sample broken yesterday for a width 12 inches, gave by assay 2 ounces 3 dwts. 4 grains of gold per ton. The ground stoped for the month 8 fathoms 4 feet 9 inches. The No. 2 stope to the north of rise has been worked within a short distance of the engine shaft where the quartz became pinched. The men were then put to stope to the north of the winze. The quartz at present is 8 inches wide, and worth by assay 1 ounce 15 dwts. 8 grains of gold per ton. The ground stoped in both places 9 fathoms 4 feet 2 inches.—Pennett's shaft. The crosscut driving west at the 145 feet level has been further extended 10 feet 2 inches, total distance from the level 301 feet 6 inches. We have not discovered anything of value since my report of the 21st ulto., but since the recent rains the water has very much increased, so much that we are obliged to work the engine four strokes per minute faster, but this is only a temporary influx, and will abate as soon as the wet season is over.—South shaft. The shaft has been further deepened 11 feet 9 inches, making a total of 19 feet below the crosscut, or 52 feet 5 inches on the course of the lode (from the vertical). I am pleased to say the lode here has greatly improved since my report of the 21st ult. On the 22nd ult. we discovered that there was from 18 inches to 2 feet of stone standing towards the hanging wall, and on being sampled was found by pan washing to be worth 1 ounce of gold per ton. Some samples showed a great deal more than 1 ounce, as stated in the cable The last two or three days the pannings have not been so good, and the lode for the present is rather disordered, but this, I think, is only temporary. The lode is letting out a good deal of water, which, I think, is principally surface water and on Saturday I started to drive north and south of shaft on the course of the lode, with a view to taking up the water above this point, and pump it from a cistern to surface, after which resume the sinking with much less trouble. A sample from the end north of shaft for a width of 20 inches gave by assay 8 dwts. 6 grains of gold per ton, and a sample from the south end for 2 feet wide gave by assay 14 dwts. 10 grains of gold per ton. The crosscut east from this shaft has been advanced 18 feet 1 inch, making a total of 83 feet 6 inches. We should intersect the counter lode in about 12 feet further driving. The ground is of a most favourable character.—Prospecting. The No. 1 shaft at 60 feet from our southern boundary on the McTaggart's lode has been sunk 6 feet 1 inch, total depth from surface 111 feet. Since the recent heavy rain the water has so increased that the coolies could do but very little more than keep the water, and yesterday I suspended the sinking and put the men to drive north and south on the course of the lode at 5 feet from the bottom of the shaft in a lode from 20 inches to 2 feet wide, and worth by assay 5 dwts. 8 grains of gold per ton. In the cross cut driving at the bottom of the No. 4 shaft on this lode, we have not discovered anything to notice. The west cross cut has been driven 2 feet 3 inches, total 10 feet 7 inches; east cross cut driven 2 feet 1 inch, total 9 feet 3 inches. The shaft is down in a very hard belt of ground, and the lode is pinched and poor. I have resumed the sinking to-day to see if it will open out and improve in value. Comparatively little has been done in the No. 5 shaft during the past fortnight. The contractor's coolies left him twice, and the work was at a standstill. It has been sunk 4 feet 2 inches, total from surface 65 feet. The lode is 18 inches wide, and worth, by assay, 6 dwts. 4 grains of gold per ton. Our surface operations do not call for comment, and our machinery, pitwork, &c., are in good order and working well.—Health: The general health of the camp is good.

NUNDYDROOG.—Mr. T. P. Grey, September 4: Report of the work done for the month of August: Taylor's shaft sunk 22 feet 6 inches, total depth 1117 feet 6 inches. The lode is 2 feet wide, assaying ½ ounce per ton. 1080 north driven 40 feet 6 inches, total length 115 feet 6 inches. The lode is smaller, being now 8 inches wide, assaying 13 dwts. per ton. 1080 south driven 42 feet, total length 88 feet. The lode is 1 foot wide, assaying 6 dwts. 12 grains per ton. 1000 south crosscut east driven 32 feet, total length 70 feet. This is now suspended. 1000 north driven 59 feet, total length 619 feet. The lode is 3 feet wide, assaying 1 ounce 6 dwts. per ton. 1000 north winze sunk 37 feet. Total depth 50 feet. The lode is 1 foot 6 inches wide, assaying 1 ounce 12 grains per ton.—1000 north rise, against main shaft. Risen 42 feet, total height 42 feet. The lode is 3 feet 6 inches wide, assaying 1 ounce 12 dwts. 12 grains per ton. 920 north No. 2 drive driven 11 feet, total length 283 feet. The lode has cut out, and the drift is suspended. 920 north rise, against main shaft, risen 23 feet 6 inches, total height 46 feet 6 inches; and main shaft sunk 10 feet, total depth 29 feet when we holed these two places. The lode at the point of contact is 1 foot 6 inches wide, assaying 9 dwts. 18 grains per ton. We are now stripping down the shaft below the 840, and hope soon to have skip road completed to 920 level. 840 north, cross cut east, driven 19 feet, total length 54 feet. We have cut a stringer of quartz containing a trace of gold. 680 north cross cut east driven 33 feet, total length 91 feet. No change. 680 north cross cut west driven 41 feet, total length 102 feet. No change. Kennedy's shaft sunk 13 feet 6 inches, total depth 566 feet. The pitwork is now working satisfactorily. 520 north driven 57 feet 6 inches, total length 197 feet. The lode is 1 foot 6 inches wide, assaying 6 dwts. 12 grains per ton. 520 south driven 59 feet, total length 210 feet. The lode is 1 foot wide, assaying 3 dwts. 6 grains per ton. 440 south driven 94 feet, total length 470 feet. The lode is 1 foot 6 inches wide, assaying 13 dwts. per ton. 370 south driven 43 feet 6 inches, total length 264 feet 6 inches. The lode is 2 feet 6 inches wide, assaying 1 ounce 16 dwts. 18 grains per ton. 370 north, No. 3 bottom stope, stoped 19½ fathoms in a lode 5 feet wide, assaying 1 ounce per ton. 370 north, cross cut west, driven 29 feet, total length 62 feet 6 inches. There is no change to report. The stopes, &c., working by hand labour are as follows:—1000 south No. 1 winze, ground cut 11 feet, total distance 16 feet, size lode 6 inches, assay value 18 dwts. 18 grains. 1000 south No. 2 winze, ground cut 5 feet, total distance 19 feet 6 inches, size lode 4 inches, assay value 3 dwts. 6 grains. 920 north No. 1 drive, ground cut 13 feet 6 inches, total distance 128 feet 6 inches, size lode 2 inches, assay value 3 dwts. 6 grains. 840 north crosscut east, ground cut 6 inches, total distance 35 feet, 760 north back stope, ground cut 10 feet, size lode 1 foot, assay value 10 dwts. 680 north winze, ground cut 7 feet 6 inches, total distance 67 feet 6 inches, size lode 6 inches, assay value 9 dwts. 18 grains. 680 north No. 1 bottom stope, ground cut, 13 feet 6 inches, size lode 1 foot, assay value 1 ounce 2 dwts. 18 grains. 680 north No. 2 bottom stope, ground cut 27 feet, size lode 1 foot, assay value 8 dwts. 18 grains. 600 north No. 1 bottom stope, ground cut 25 feet, size lode 1 foot 6 inches, assay value 10 dwts. 600 north intermediate, ground cut 5 feet, total distance 48 feet, size lode 1 foot 6 inches, assay value 14 dwts. 600 north No. 2 bottom stope, ground cut 32 feet, size lode 6 inches, assay value 12 dwts. 600 north No. 1 back stope ground cut 22 feet 6 inches, size lode 6 inches, assay value 13 dwts. 600 north No. 2 back stope, ground cut 21 feet, size lode 1 foot, assay value 1 ounce 11 dwts. 12 grains. 520 north No. 1 bottom stope, ground cut 20 feet, size lode 1 foot, assay value 8 dwts. 18 grains. 520 north No. 2 bottom stope, ground cut 22 feet, size lode 1 foot 3 inches, assay value 15 dwts. 6 grains. 520 north No. 3 bottom stope, ground cut 16 feet 6 inches, size lode 2 feet, assay value 9 dwts. 18 grains. 520 north No. 4 bottom stope, ground cut 29 feet, size lode 1 foot 6 inches, assay value 10 dwts. 18 grains. 520 north No. 1 back stope, ground cut 25 feet, size lode 1 foot 6 inches, assay value 7 dwts. 12 grains. 370 north No. 1 back stope, ground cut 22 feet, size lode 1 foot, assay value 9 dwts. 18 grains. Kennedy's. 95 north intermediate, ground cut 9 feet, total distance 9 feet, size lode 3 feet, assay value 6 dwts. 12 grains. 95 north No. 2 bottom stope, ground cut 25 feet, size lode 1 foot, assay value 10 dwts. 160 north crosscut east, ground cut 10 feet, total distance 10 feet. 160 north intermediate, ground cut 10 feet, total distance 183 feet, size lode 4 inches, assay value 12 dwts. 300 south No. 2 back stope, ground cut 19 feet, size lode 1 foot 6 inches, assay value 1 ounce. 300 north No. 1 back stope, ground cut 31 feet 6 inches, size lode 1 foot, assay value 4 ounces 17 dwts. 12 grains. 300 north No. 2 back stope, ground cut 33 feet, size lode 3 feet, assay value 1 ounce 13 dwts. 18 grains. 370 south drive, ground cut 6 feet, total distance 22 feet, size lode 5 feet, assay value 1 ounce 16 dwts. 18 grains. 370 north drive, ground cut 17 feet, total distance 341 feet, size lode 3 feet, assay value 2 ounces 18 dwts. 12 grains. 370 north No. 1 bottom stope, ground cut 25 feet 6 inches, size lode 1 foot, assay value 10 dwts. 370 north No. 2 bottom stope, ground cut 25 feet 6 inches, size lode 1 foot, assay value 8 dwts. 18 grains. 370 north back stope, ground cut 32 feet 6 inches, size lode 6 inches, assay value 3 ounces 1 dwt. 18 grains. 440 south rise and stope, ground cut 34 feet, size lode 3 feet, assay value 12 dwts.—Mills. Both mills and tailings machinery are running well.—Health. The general health of the camp is good.—Old mill samples. Rough quartz through stonebreaker, 1 ounce 12 dwts. 12 grains; smalls, 1 ounce 6 dwts.—New mill samples. Rough quartz through stonebreaker, 19 dwts. 12 grains; smalls, 16 dwts. 6 grains.

SOUTH-EAST MYSORE.—Fortnightly report of Captain M. Scantlebury, mine agent, September 4: Beresford's shaft. This shaft has been sunk 11 feet, now 238 feet from surface. The lode is 3 feet wide, composed of dark blue quartz; a fine looking lode. Six samples from it have varied from 5 dwts. 21 grains to 3 ounces of gold to the ton. 200 feet level north has been advanced 15 feet, now 133 feet from shaft. The lode is 4 feet wide, 2 feet of which is solid quartz against the hanging wall. Six samples from this part have given an average value of 1 ounce 12 dwts. of gold to the ton. The foot part will average 6 dwts. of gold to the ton. The lode is changeable, but on the whole it is a good one. Rise above the 200 feet level south has been put up 9 feet, now 33 feet above the level. The lode is 2 feet 6 inches wide, composed of quartz, but the assay value is rather low, 4 dwts. 8 grains of gold to the ton, I have suspended this for the time and put the men to commence a new rise just behind the 200 feet level north. This must be done to prepare for stoping the ground by hand labour. New shaft north of Beresford's has been sunk 17 feet, now 77 feet from surface. We have cut a little water, and are now squaring and timbering the shaft. We are pushing this shaft as fast as possible.—Pigott's shaft. The crosscut east at the 180 feet level has been advanced 5 feet, now 45 feet 6 inches from shaft. The rock is extremely hard.—Surface. The stamps I expect will be ready to work by October 1, and I hope by this the pipes will have arrived from England for conveying the water, and returning it to the stamps.

SUTHERLAND REEF.—From the manager's latter, dated August 29: East drive has been advanced 11 feet and west drive 12 feet, making the totals 123 feet and 142 feet respectively. The reef in the former is not so large as it has been, being about a foot wide, but very good. In the latter the reef has been a good deal broken up for the last 20 feet, but we are now getting into better reef. In the raise I have connected with the winze, thus getting good ventilation.—Shaft. The carpenters and miners are still engaged in putting in the guides in one compartment, and I hope to get this completed to the 200 feet level by the end of next week. As soon as this is completed I shall resume sinking.

TRANSVAAL GOLD EXPLORATION AND LAND.—Extracted from general manager's advices dated August 29: Electric plant. The foundations for generator were completed, and the framework, on which the machine will be mounted, was practically finished. Work had been begun on the shed for the turbine and generator. The erection of the motor shed was well forward.—Cyanide works at Kameel's mill. The excavations for the new cyanide works were making good progress. A bridge was constructed across Kameel's creek for transport of the building stone required for the walls.

MINERAL RESOURCES OF THE UNITED STATES.

IRON ORES.

By JOHN BIRKINBINE.

(*Continued from page* 1034.)

ALL the States which contributed over 100,000 tons of iron ore in 1893 show a decided decrease in output, with the exception of Minnesota, and in Colorado, for local reasons already mentioned. The reduction is especially pronounced in Michigan, New York, Wisconsin, Pennsylvania, and Alabama.

In the Lake Superior region the output of iron ore was nearly one-third less than it was in 1892; there was slightly greater decline than this in Pennsylvania's product, and in New York scarcely three-fifths of the product in 1892 was obtained.

The rank of the principal States as producers exhibts no material change from that given in 1892 with these exceptions: Virginia has risen from seventh to fifth place, New York and Wisconsin being correspondingly lower, while New Jersey and Tennessee changed positions, the former being now ninth, while the latter is eighth in order of precedence.

In contributing to the low price of iron ore the miners', labourers', mechanics', and stevedores' wages, railroad and lake freights, &c., have all shared in the reduction more liberally than the royalties, which, in many cases, have remained at the same figures as in former years. The royalties will share in any further decline in the price, and even at the rates which ore now commands many mines will be unable to resume operations and pay the royalties which have been collected for years. As an instance of this a prominent mine on the Menominee range in Michigan is making preparations to resume active operations in order to give work to the men, the owner of the property generously agreeing to waive all claim to royalty for one year, otherwise the mine would have remained idle until better prices could be obtained for ore.

Michigan.

Michigan still holds first rank as an iron ore producer with an output in 1893 of 4,668,324 long tons, or 40·29 per cent. of the total for the United States. This is, however, a falling off of 2,875,220 long tons, or 38·11 per cent. from the 1892 product of 7,543,544 long tons. Michigan's percentage of the total output of the country in 1892 was 46·29 per cent., whereas in 1893, as above stated, it was but 40·29 per cent. Of the 1893 total for the State 4,636,128 long tons, or 99·31 per cent, was classed as red hematite, 23,420 long tons, or 0·50 per cent., as brown hematite, and 8776 long tons, or 0·19 per cent., as magnetite, giving to Michigan first, tenth, and sixth places respectively, in the proportionate production of these three classes of ore, due to supplying 56·04, 1·27, and 0·66 per cent. of the total output of each variety.

Considering the mines locally it was found that the greatest deficiency in production was in the Gogebic range (which is partly in Michigan and partly in Wisconsin), for while the older Marquette and Menominee ranges also declined in output, the proportions were not as great as in the Gogebic range. This may be due in part to the fact that the newly developed Mesabi ores of Minnesota replaced some of the ore formally obtained from this range. These Mesabi ores are soft, easily mined at present, and the freight on them to lower lake ports closely approaches those paid on Gogebic ores.

A remarkable instance of the low price of iron ore which prevailed during the latter half of 1893 is obtained from the record of a Sheriff's sale of the stock piles of the Colby, Tilden, and Comet Mines, for which $1·10 per long ton was obtained for the ore sold. The deficiency in demand, and the inadequate compensation obtainable for such ore as was sold, brought absolute distress upon the inhabitants of the Gogebic range, and in many cases skilled miners, willing and anxious for work, were absolutely penniless, and became unwilling objects of charity.

The number of unemployed workmen cannot be determined with exactness, some reports claiming that in the iron ore regions of Michigan 60,000 men, who were in one way or another dependent on the iron ore industry, were out of employment. In one instance a manager of an iron ore company in the Lake Superior region was requested by its unemployed workmen to be allowed to take the place of a steam shovel, which was used for loading ore on cars from stock piles; permission being granted, the men struggled to obtain places which would yield for a hard day's labour a pittance of about 50 cents. It is doubtful if the distress in the silver mining industry, which has been widely discussed through the Press, was as pronounced as in some portions of the Lake Superior iron ore region. As indicative of the prevalent distress it was authoritatively reported that on the Gogebic iron ore range in Michigan the three towns of Ironwood, Bessemer, and Wakefield had 5447 persons who were receiving aid, because the iron ore mines of that range had closed down. As showing the nationalities represented by the population, it is of interest to note that of these 5447 persons, 1011 were Scandinavians, 838 English, 792 Irish, 742 Fins, 626 Poles, and the balance Bohemians, Italians, Hungarians, Austrians, French, &c., but 63 being native Americans.

The Marquette range has held its position remarkably, due, no doubt, to the facts that the hard iron ores are now better prepared for furnace use, that the majority of the ores won are of high Bessemer grade, that in transportion less moisture is absorbed than by the softer ores of the Gogebic and Mesabi ranges, and that the distances covered in carrying the Marquette ores to lower lake ports are less than from the other ranges, except the Menominee. In addition, the companies operating on the Marquette range were, as a rule, generally longer established and stronger financially than the most of those operating the Gogebic Mines. Some of the former own vessels, and most of them have superior machinery equipment at the mines.

In consequence of the depressed condition of the trade but little development work was done, and although some few new mines were opened, but little, if any, ore was shipped from them.

Alabama.

This State continues to occupy second place as an iron ore producer, but it seems probable that in the course of a year or two this position will be taken by Minnesota, where, owing to the opening of the new mines, and the development of the north-western portion of the country, the State will assume a more prominent position in the iron ore industry.

The output of Alabama in 1893 was 1,742,410 long tons, or 15·04 per cent. of the total for the country. Of this amount 1,281,292 long tons or 73·54 per cent. of the State's total was red hematite, in which class of ore Alabama occupied third place, supplying 15·49 per cent. of the total for the country. This is a decline from the previous year of 375,736 tons, or 22·68 per cent. in this class of ore; 461,118 long tons, or 26·46 per cent. of the ore mined was classed as brown hematite, a decline from the amount won in 1892 of 193,925 long tons, equivalent to a deficiency of 29·60 per cent. In this class of ore Alabama occupied

second position, producing 24·94 per cent. of the country's total. This State produced 569,661 long tons, or 24·64 per cent. less ore in 1893 than in 1892.

The principal features of the year 1893 were (1) a reduction in the prices for winning ore to a point formerly thought to be unattainable, and (2) a more careful selection of the material fed to blast furnaces. During the year a large amount to beneficiate some of the more siliceous ores. The greatest activity in mining operations continues in the vicinity of Birmingham, where the hard and soft red hematite iron ore is won, and in the north-eastern section of the State where brown hematite ore is obtained for local charcoal and coke furnaces.

The Russellville district, in north-western Alabama, although producing considerable ore, fell behind its last year's output, owing to the suspension of near-by furnace plants.

Minnesota.

This State produced 1,499,227 long tons of iron ore in 1893, or 12·94 per cent. of the total for the United States, giving it third place. The increase over its 1892 output of 1,255,465 long tons was 244,462 long tons, or 19·47 per cent. All of this ore was of the red hematite character, in which class the State stood second, supplying 18·13 per cent. of the total of this variety of ore.

The new Mesabi range opened at an inauspicious time for obtaining a large output, yet last year it mined 684,194 tons of ore, a large amount for what was really the first active mining year on this range. The production would probably have been larger but for the fact already mentioned, viz., an exceedingly active competition with the older Lake Superior ranges, and the low prices obtained for the ore, taken in connection with the royalties demanded at most of the mines, acting as an offset for the cheapness with which the ores could be won. The royalties on some of the mines were such that a number of leases were reported as cancelled last year on that account. It has been stated that the average royalty on all the ore mines on the Mesabi range, including the fee simple mines, amounted to about 37½ cents per ton in 1892-93. Another point which prevented a large demand for the ore was its fine comminution, which led some managers to use but small proportions of the ore in the blast furnace charge. It is probable that this objection will be overcome, however, and it is stated that the furnace at Duluth was for a time run on all Mesabi ores, with good results.

Pennsylvania.

This State, together with New York and Colorado, produced all four classes of iron ore in 1893. The output of Pennsylvania in 1893 was 697,985 long tons, giving it fourth place, although producing but 6·02 per cent. of the country's total. This amount represents a decline of 386,062 long tons, equivalent to 35·61 per cent. from the 1892 product of 1,084,047 long tons.

Of this 697,985 long tons produced, 480,164 tons, or 68·79 per cent. was magnetite; 158,376 tons, or 22·69 per cent., brown hematite; 57,633 tons or 8·26 per cent., red hematite; and 0·26 per cent. or 1812 tons carbonate ore. Pennsylvania occupying in the country's total of these classes of ore first, fourth, seventh, and sixth places, and producing 36·08 per cent., 8·56 per cent., 0·70 per cent., and 1·34 per cent. respectively of the nation's output of varieties named.

The State has declined in the production of all the different classes of ore.

In Pennsylvania the major portion of the iron ore mined is obtained from the eastern and southern portions of the State, and as the blast furnaces in this district were among the first to feel the change in demand a number blew out, their inactivity affecting the amount of ore mined locally. Some local ore, however, was displaced by Lake Superior ores, which also competed with the highest grades of foreign ores practically at tide water. The bulk of the magnetite mined in Pennsylvania continues to come from the Cornwall ore hills, and probably there is no better indication of the severity of the business depression than in the greatly reduced output from this deposit, where ore can be mined so cheaply and supplied to so many blast furnaces close by. For a part of the year all blast furnaces at Cornwall, and most of those within a few miles of the ore hills, were idle, a condition unprecedented, and the deposit produced but 439,705 long tons, or 69·28 per cent. of what it contributed in 1892. By reference to the record of large producers further on, it will be seen that, notwithstanding this marked deficiency, the Cornwall ore hills produced more iron ore in 1893 than any other single mining operation in the country, whereas, with a product of 195,009 tons greater in 1892, there were in that year three plants which exceeded the output of Cornwall. *(To be continued.)*

A DESPATCH from Esperance Bay, Western Australia, August 20, says:—The Warden returned from the new find to-day accompanied by Lawrence Sinclair, who discovered the reef and holds the reward claim known as the Norseman. The reef is situated fifteen miles north of Dundas and about 130 miles from Esperance. It outcrops for three miles, running north and south, and is from 4 to 9 feet wide, with an underlay to east and west. Sinclair brought about ½ cwt. of specimens both from the cap of the reef and below the surface. The stone has rich veins of coarse gold running through it, and is calculated to run at least 30 ounces to the ton. The gold was discovered in a peculiar manner. The reef bore traces of having been previously tapped, evidently by an inexperienced prospector. Sinclair had been prospecting a couple of hours on it, and tiring from the effects of rheumatism sat down. Seeing a likely bit of stone lying loose he broke it with a pick, and found it studded with coarse gold. The prospect giving him fresh energy, he again started to work, and soon struck stone in the reef bearing rich gold. Experts here and at Dundas regard the stone as being almost as rich as Bayley's. Sinclair, who has been carting to Coolgardie for some time, only left here a fortnight ago to try to obtain a contract for sinking a Government dam at Dundas. His brother was prospecting further out, and in looking for him saw the reef outcropping, and considered it good enough to prospect. Ramsay Brothers, of Mount Barker, South Australia, have pegged a claim adjoining Sinclair's. Their claim, which is also very good, is known as the Norseman No. 1 North. The whole line of reef is pegged out, and the gold has been got on every claim. Dundas is deserted, and intense excitement prevails here.

ANOTHER important sale is reported of a California mine, says the *San Francisco News Letter*, of September 8. Early last week J. G. Mather, the well known mining man, closed up negotiations, and secured upon behalf of an English syndicate the transfer of two valuable deposits of auriferous gravel in Trinity County. One piece belonged to the Carr estate, and the other was the claim on which the late Thomas H. Blythe expended during his lifetime over $125,000. The amount paid by the English purchaser was $25,000 for one-half the capital stock, the money being payable in easy instalments. The claim covers a stretch of over four miles along the ridge with a large tract of gravel available for hydraulicing, the rest being worked by drift mining. The property is said to possess considerable value as an investment, and the terms of sale can be commended for the common sense exhibited by both parties to the transaction.

NEW PRIMROSE GOLD MINING CO., LIMITED.

BALANCE SHEET, 30th JUNE, 1894.

LIABILITIES.

To Capital authorised, 280,000 Shares of £1 each, £230,000 (Shares in reserve, 848.)			
„ Issued, as per last account fully paid	£174,287 0 0		
„ Issued for purchase of New Moss Rose property and plant ...	43,636 0 0		
„ New issue subscribed by Shareholders	11,229 0 0		
		£229,152	0 0
„ Native pay due to date	... ...	3,700	0 0
„ Sundry Creditors...	... ...	12,610	0 11
„ Advances against gold in transit	... ...	7,302	10 6
„ Balance (Profit and Loss) ...	... ...	116,596	8 10
		£369,361	0 3

ASSETS.

By Property Account (claims) as per last Account	£149,795 14 6		
„ Purchase of New Moss Rose Property ...£43,636 0 0			
„ Less Buildings, Machinery,&c., transferred to separate heads 13,621 0 0	30,015 0 0		
		£179,810	14 6

	At 30th June, 1893.	Subsequent additions during year.	After deducting depreciation.
By Battery Plant	£52,000 0 0	£17,313 17 6	£65,850 0 0
„ Mine Plant ...	5,000 0 0	4,513 12 8	8,560 0 0
„ Hauling and Pumping Plant ...	9,000 0 0	9,414 10 7	16,570 0 0
„ Tramway and Plant ...	7,500 0 0	2,132 6 0	8,670 0 0
„ Mine Buildings	11,000 0 0	6,294 6 6	15,570 0 0
„ Cyanide Experiment Works	—	144 9 9	144 9 9
„ Cyanide Works	18,000 0 0	6,285 2 4	20,640 0 0
„ Reservoirs and Dams ...	1,300 0	3,649 4 1	4,440 0 0
„ Rock Drill Plant ...	—	6,727 13 4	6,727 13 4
„ Permanent Shaft Sinking ...	—	1,072 12 0	1,072 12 0
„ Live Stock, Carts, &c....	361 0 0	203 10 0	500 0 0
„ Freehold Ground ...	800 0 0	31 1 0	838 1 0
„ Office Furniture	23 16 6	–	23 16 6
„ Fencing and Planting ...	—	103 5 10	103 5 10
	£104,984 16 6	£57,892 11 7	
Less, written off for depreciation ...	£162,877 8 1 13,167 9 8		
	£149,709 18 5		

By Buildings acquired with New Moss Rose Property	£	1,675 0 0
„ Sundry Machinery, &c., do. do.		4,681 1 11
„ Gold in transit (since realised)		18,612 2 10
„ Cash at Mine		313 3 7
„ Quartz at Grass (446 tons)		285 0 0
„ Sundry Debtors		3426 14 3
„ Stores on hand		10,845 4 9
	£	369,361 0 3

PROFIT AND LOSS ACCOUNT FOR TWELVE MONTHS ENDED 30TH JUNE, 1894.

DR.

Cost.	EXPENDITURE.		
s.			
8·936	To Mining Expenses	£ 70,299	6 4
3·576	„ Mine Development	28,130	18 6
1·500	„ Hauling and Pumping Expenses	11,796	3 1
·744	„ Tramming Expenses...	5,853	12 1
2·506	„ Milling Expenses	19,720	17 10
·538	„ Miscellaneous Expenses	4,231	12 5
·502	„ Salaries, including Management—London and Head Office	3,952	11 5
·218	„ Licenses and Rents	1,713	6 8
1·211	„ Depreciation and Redemption	9,522	7 4
s. 19·731	Cost per ton on 157,336 tons ore crushed,		
5·926	To Cyanide Working Expenses...	44,232	5 6
·488	„ Depreciation and Redemption written off Plant	3,645	2 4
s. 6·414	Cost per ton 149,271 tons treated. To Balance to No. 2 Account, being net profit on twelve months' working	103,094	16 3
		£306,192	19 9

CR. REVENUE.

By Gold from Battery 64,447·17 ozs. 72·86	£234,784 1 0		
„ Do, do. Tailings 24,819·33 ozs. s. 56·231	69,780 16 1		
„ Concentrates sold	677 7 4		
		£305,242	4 5
„ Rebate on Coal Transport		231	16 0
„ Sundry Rents		718	19 4
		£306,192	19 9

PROFIT AND LOSS ACCOUNT No. 2, JUNE 30, 1894.

DR.

To Dividend No. 8, paid 16th Aug., 1893 (20 per cent.)	£	34,920 4 0
Do. No. 9, paid 1st Feb., 1894 (20 per cent.)		43,647 13 4
To balance to new Account		116,596 8 10
	£	195,164 6 2

CR.

By Balance from above	£	103,094 16 3
„ Premium on Shares		26,611 17 0
„ Balance from Account, 30th June, 1893... ...		65,457 12 11
	£	195,164 6 2

Examined and found correct,
A. MURDOCH
SEPTIMUS EDKINS } Auditors.
JOHN STROYAN, Vice-Chairman
E. BRAYSHAW, Managing Director
S. B. JOEL } Directors.
Johannesburg Consolidated Investment Company, Limited,
Secretaries.
per D. HENDERSON.
Johannesburg, August 20, 1894.

GLENCAIRN MAIN REEF GOLD MINING COMPANY, LIMITED.

BALANCE SHEET, 30th JUNE, 1894.

DR. LIABILITIES.

To Capital (200,000 Shares of £1 each, fully paid)	£200,000 0 0
„ Cash deposits for applications for new issue ...	32,552 14 8
„ Native pay due at date	1,387 7 5
„ Sundry Creditors	6,570 17 2
„ Balance (Profit and Loss)	27,859 0 7
	£268,369 19 10

CR. ASSETS.

	At November 30, 1892.	Additions since made.	After deducting depreciation.
By Batttery Plant...	£22,000 0 0	£11,858 9 2	£33,858 9 2
„ Mine Buildings ..	4,938 10 7	4,601 5 6	9,114 3 1
„ Hauling and Pumping Pump.	6,000 0 0	9,841 0 10	15,241 0 10
„ One spare Pump.	383 13 4	—	383 13 4
„ Mine Plant	1,939 15 11	2,907 1 2	4,651 16 11
„ Share in Pumping Plant	3,000 0 0	1,544 11 6	4,090 0 0
„ Tramway & Plant	2,591 11 0	1,352 19 7	3,761 9 3
„ Mine and Office Furniture	318 13 7	26 11 6	327 19 6
„ Permanent Works	5,000 0 0	—	—
„ Live Stock, Carts, &c.....	240 0 0	222 18 0	444 0 0
„ Tailings Pump ...	918 4 8	1,041 4 7	1,959 9 3
„ Reservoir & Dams	1,560 8 0	534 9 0	1,929 6 6
„ Fencing and Planting	97 12 6	12 5 0	109 17 6
„ Electric Lighting Plant.....	530 12 10	2,966 16 11	3,496 9 9
„ Rock Drill Plant.	—	9,172 7 10	9,172 7 10
„ Cyanide Works ...	—	7,950 9 3	7,950 19 3
	£47,519 2 5	£54,032 19 10	
	£103,552 2 3		
Less, written off for depreciation.	7,060 0 1		
			£ 96,492 2 2
„ Property Account (portion of Mijnpacht)			150,000 0 0
„ Gold in transit (since realised).....			11,493 3 5
„ Cash at Mine and Bankers			1,961 2 1
„ Quartz at Grass.....			27 0 0
„ Stores on hand			4,758 2 1
„ Water rent (paid in advance to 1st November)...			458 8 0
„ Sundry Debtors			180 2 1
			£268,369 19 10

PROFIT AND LOSS ACCOUNT FOR NINETEEN MONTHS ENDED 30TH JUNE, 1894.

DR.

Per ton.	EXPENDITURE.		
7 870	To Mining Expenses	£29,397	9 3
7 451	„ Mine Development (including three months when battery was not running)	27,832	12 2
1·422	„ Hauling and Pumping Expenses... ...	5,311	15 0
0·370	„ Tramming Expenses	1,381	6 11
3 590	„ Milling Expenses	13,408	15 4
2·258	„ Miscellaneous Expenses	8,434	13 6
1·510	„ Water Service (Rent and Maintenance)	5,640	5 8
24·471	„ Cost per hour on 74,706 tons crushed		
—	„ Cyanide Working Expenses	10,661	19 9
5·304	„ Cost per ton on 40,222 tons treated		
—	„ Balance (being profit on nineteen months' working)	32,529	1 4
		£134,597	18 11
1·890	„ Depreciation as detailed in balance-sheet	£ 7,060	0 1
—	„ Balance to next Account...	27,859	0 7
		£ 34,919	0 8

CR. REVENUE.

By Gold from Battery (30,225·79 ozs. at 70·935s.)...	£107,204 0 2	
By Gold from Tailings (9,805·56 ozs. at 51·394s.)	25,197 7 9	
By Concentrates sold	1,911 11 0	
	£134,312	18 11
By Rents...	285	0 0
	£134,597	18 11
By Balance brought down	£ 32,529	1 4
By Balance as per account to November 30, 1892 ...	2,389	19 4
	£ 34,919	0 8

Examined and found correct,
JNO. MOON
SEPTIMUS EDKINS } Auditors.
JOHN STROYAN, Vice-Chairman
S. B. JOEL } Directors.
Johannesburg Consolidated Investment Company, Limited,
Secretaries,
per D. HENDERSON.
Johannesburg, Aug. 23, 1894.

NEWS from Coolgardie, under date August 22, says:—"Captain Nelson has returned from Mount Margaret, and says that the auriferous country in that direction comprises a radius of from 40 to 50 miles, scattered over which are about 700 prospectors. Several reefs taken up near Mount Margaret are being worked by dollying, and yielding good gold. The best alluvial has been unearthed about 16 miles south of the Mount. The prospectors obtain their provisions from Kurnalpi, distant about 180 miles. Captain Nelson says that at a spot about 90 miles from Kurnalpi he came across one of the most lovely regions under heaven. It was abundantly as well as richly grassed, with creeks and pools of water extending for miles, while kangaroo and other native game were met with in abundance. Most of the gold in that district was found in the creeks. Captain Nelson predicts that the Mount Margaret country will be a magnificent reefing field.

THE Chamber of Mines Museum is temporarily in possession of a fossil, which, found in a banket seam on the Rand, should settle once and for all the question as to the geological age of Witwatersrand, and the conditions under which the conglomerates were spread. It appears, says the *Zoutpansberg Review*, to be a very fairly preserved trilobite, and the Curator of the Museum is hopeful that the owner will allow it to become, either by gift or purchase, the property of the Chamber, in which case it will be sent to England to the best paleontologist for accurate determination.

SOCIETY OF ENGINEERS.—The council of the above society have unanimously elected Mr. Perry F. Nursey, a past-president, and for 36 years a member of the society, as honorary secretary and treasurer, in place of the late Mr. Alfred Williams, who had occupied the position since the foundation of the society in 1854.

MINING NOTES FROM JOHANNESBURG.

By H. BUSH, M.E.

Crown Reefs.

THIS mine is not sufficiently developed to keep the battery going in full swing, and it is probable some of the stamps will have to shut down. The shares are dear at £8.

Wolhuter

are starting 60 extra stamps about Christmas, when the profits should exceed £5000 per month. The mine is well developed, and looks fairly well.

Vogelstruis (Main Reef).

This mine is being prospected, but so far without results, the reefs being poor, faulty, and patchy.

Village Main Reef.

The deep level shaft is now down 600 feet, but sinking is stopped, as they cannot get the water out with buckets, and will have to erect pumping gear. Sinking must be continued a further 500 feet to strike the reef.

Queen Mine (West Rand).

This mine is a duffer, and will never be worth anything, or pay dividends.

Randfontein

is looking well, and has a very rich leader.

Carter Phillips Gold Recovery Block

is turning out the best reef on the West Rand, and looks like developing into a real good thing.

May Consolidated

is opening up well; new cyanide works are to be erected and run on the company's own account. The future of this mine looks very promising, and shares are a cheap purchase about par.

United Main Reef.

This mine is looking well, and when the additional 20 stamps are started should show monthly profits of not less than £5000. The financial position is very sound.

Buffelsdoorn

continues to open up well, and dividends will shortly be declared. The present low price of the shares is due to options, which will expire the end of this month, when no doubt the price will jump to 35s. or 40s. I strongly advise buying at present prices.

New Chimes

will declare another interim dividend of 10 per cent. early next month. The mine is looking splendid, and these shares at anything near £2 are certainly cheap, and will ultimately see a much higher figure.

Rietfontein.

The mine is really looking worse than ever, and I cannot understand why the battery is not closed down for development, as recommended by the consulting engineer Mr. Hammond. I believe there is a movement on foot by the insiders to rush up the price of shares, but do not buy them, as on their merits they are not worth 10s.

Alexandra Estates.

This property on development is improving in appearance. The newly-discovered reef, although patchy, will all through return a splendid average. I strongly advise the purchase of these shares at present low prices. They will ultimately go to a much higher figure.

Champ d'Or

continues to improve, and is well ahead of the mill. The present monthly outputs can easily be maintained, and dividends should shortly be declared. These shares will undoubtedly have a big jump at no distant date.

Champ d'Or Deep.

This mine is well developed and splendidly equipped. When the battery starts in October I look for great results and a corresponding rise in the price of the shares.

COMPANIES AND LEGAL ANNOUNCEMENTS.

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NOTICE IS HEREBY GIVEN, that the ORDINARY GENERAL MEETING of the COLOMBIAN HYDRAULIC MINING COMPANY (LIMITED) will be held at Winchester House (Hall No. 47), Old Broad Street, London, E.C., on THURSDAY, the 4th day of October, 1894, at Three o'clock, for the purpose of receiving the Directors' Report and Accounts for the past year, and electing Directors and an Auditor in the place of those retiring.

The Transfer Books will be closed from the 26th September to 18th October, both inclusive.

By Order,
S. A. COBBETT, Secretary.

10, Bloomfield Street, London, E.C.
25th September, 1894.

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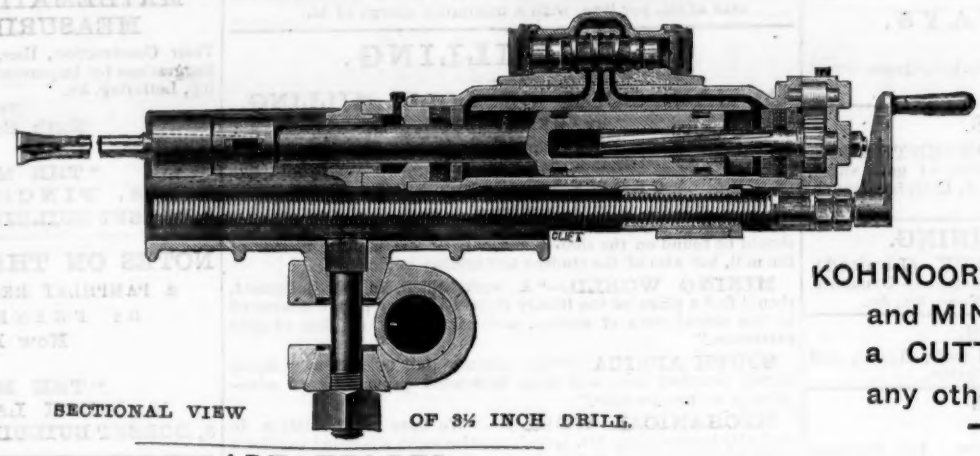

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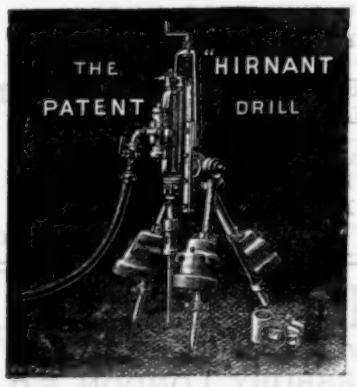

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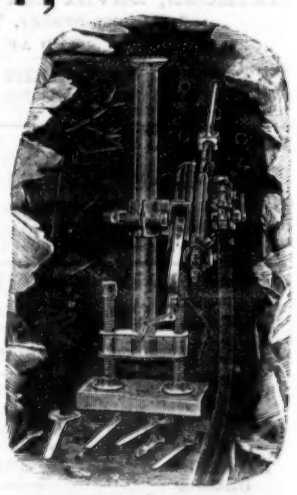

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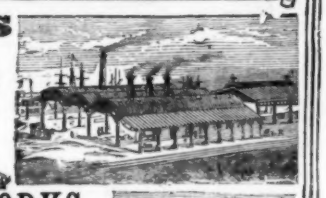

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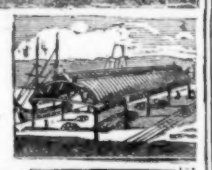

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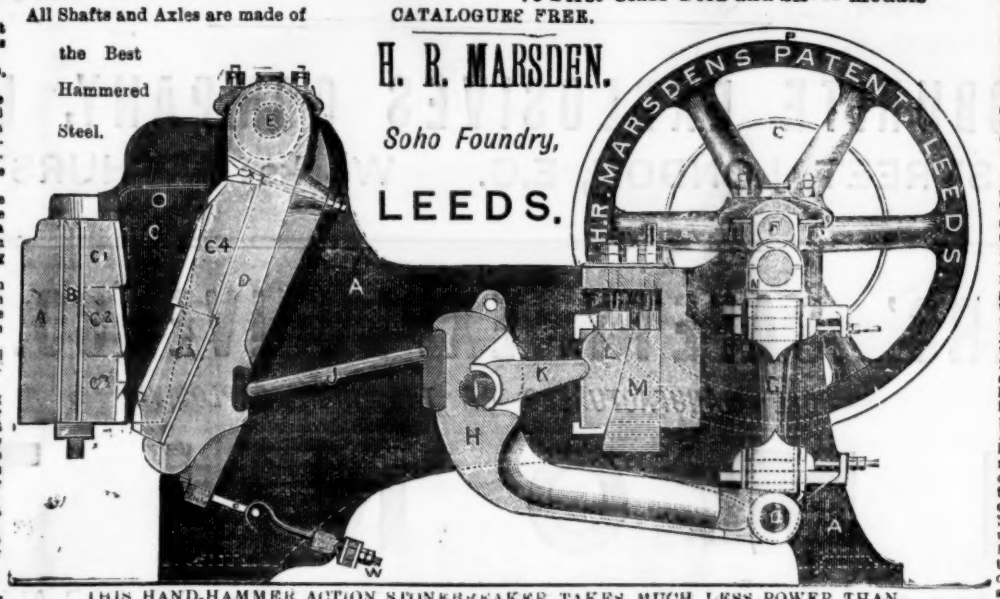

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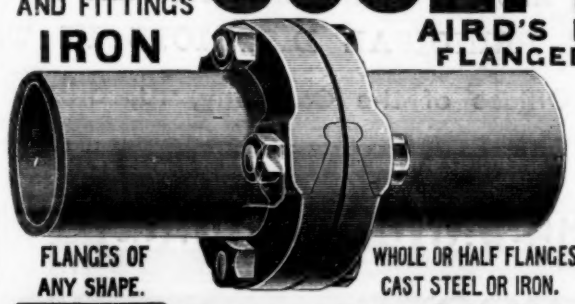

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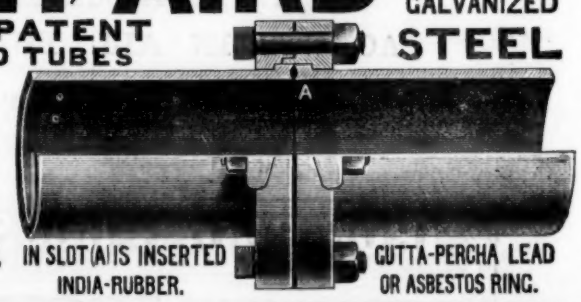

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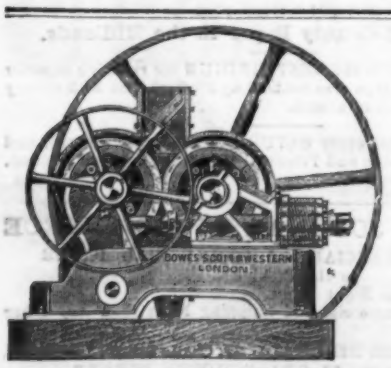

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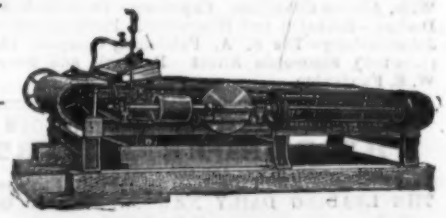

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